URGENT CARING

A PEER-REVIEWED PUBLICATION

Empowering Clinicians, Enhancing Quality of Care

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URGENT CARING
CME ELIGIBLE
2024

URGENT CARE COLLEGE OF PHYSICIANS

COLLEGE OF URGENT CARE MEDICINE

A publication of the Urgent Care College of Physicians in collaboration with the College of Urgent Care Medicine.

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From the President of the College

Advancing the Specialty of Urgent Care

Cesar Mora Jaramillo, MD, FCUCM

As I sit down after a fruitful day of "Urgent Care Advocacy Day" on Capitol Hill, I keep thinking about the future of Urgent Care medicine and how it will shape our strategic approach. Our field has come such a long way, evolving from a convenient alternative for after-hours care to a vital pillar of the healthcare system. Each day, we see the tangible impact we have on the communities we serve. And we have shown how we can step up for our communities during difficult times that impact healthcare access.

Urgent Care is essential, filling a crucial gap in providing accessible, cost-effective and high-quality care when people need it most. Yet, we all know healthcare is an evolving landscape. The expectations of our patients, the demands of our workforce and innovations in medicine are continually pushing us to adapt. That's why we're diving deep into the Urgent Care College of Physicians (UCCOP) and College of Urgent Care Medicine's (CUCM) strategic plan—to sharpen our vision and forge a path for the continued growth and recognition of our specialty.

Strategic planning isn't just a checklist; it empowers us to clearly define our goals, anticipate challenges and ensure that Urgent Care remains a vital and indispensable part of the healthcare system. By establishing clear priorities and focusing our resources wisely, we can not only strengthen our specialty but also enhance patient care and elevate the role we play in healthcare.

However, a plan is only as strong as the people behind it. Your involvement and support at every step is crucial. Your insights, experiences and unwavering dedication are the driving factors behind our progress. Whether through advocacy, education, research or participation in committees and initiatives, every contribution counts in shaping the future of Urgent Care. I encourage each of you to actively engage with our initiatives, share your expertise and help champion the changes needed to advance our field.

What does Advancing the Specialty mean for us right now? In the short term, we can expect more consistency in care, increased recognition of our specialty and stronger support for our clinicians. Looking further down the road, our efforts will solidify Urgent Care as a critical component of healthcare and an essential player in community health.

I invite each of you—physicians, nurse practitioners and physician assistants—to join us on this journey. Your insights and expertise are invaluable in shaping the future of Urgent Care medicine. Regardless of your clinical background or years of experience, we all have a role to play in moving this field forward. The road ahead is filled with opportunity, and together, we can ensure that our specialty not only meets the challenges of today but also thrives in the years to come. **Please contact us to get more involved. We need you!**

Another important topic I want to highlight is, the Urgent Care Convention is approaching! Mark your calendars and sign up if you have not done it yet. The Convention is taking place from May 3-6 in Dallas, TX. This year's clinical content is impressive and designed to help clinicians excel in your daily work challenges and patient interactions. Don't miss this opportunity to enhance your clinical knowledge and skills while networking with others! **I cannot wait to see everyone soon!**

Letter from the Editor

Share your knowledge.

Happy spring Urgentologists!

I hope you will indulge me for a few minutes while I share a story. The point will become clear at the end.

A few years ago, I was at a conference and ran into another physician who had been a paramedic back when I was a new grad from residency–probably 15-20 years earlier. She asked if I remembered her and then asked to take me to dinner that night. I agreed (we had some great barbeque at a hole-in-the-wall shack). She asked me if I remembered a patient encounter where I had taught her an important concept: At the time, she was a paramedic aspiring to go to medical school. It was a snowy night with a patient who had coded. She told me that the concept had been ingrained in her that day, and she remembered it still as a key concept in medicine. Her path took her to medical school, and on to an emergency medicine residency. She subsequently became a director of a residency program, and chief of the department. The physician shared that she had taught countless other students, residents and even colleagues the concept she learned that snowy night and wanted me to know that, even though it was simple, that teachable moment had been a turning point in her career. She wanted me to know that on that day I had not only taught her, but that through her, I had taught countless others who then went on to do the same, with a ripple effect that had taught so many people over the last 15 years. At that moment, I realized that teaching a student or apprentice was something so valuable and long-lasting, that it was more than worth the effort to share my knowledge with others less experienced. I got chills thinking about the number of people I may have indirectly affected with just that one encounter. It's a story that has stayed with me and inspired me to continue to teach, even just one little concept to a paramedic on a snowy night.

I share this story because we are often so busy we forget that medical education is built on the old-fashioned idea of apprenticeship. Commonly referred to by residents as "see one, do one, teach one," the principle is simple. You cannot effectively learn how to be a good clinician by reading a book. You need to be taught how to be a competent and effective clinician by another. This is why there are clinicals, residencies and fellowships where we teach each other.

We work in a specialty that in its infancy was staffed by seasoned emergency- and family medicine -trained clinicians but is now frequently staffed with new graduates or those new to the specialty. Although most are bright and eager to take on the wide range of Urgent Care complaints, they may be inexperienced and untrained in the literally thousands of chief complaints we may see. They may even work alone and not have the benefit of a colleague or supervisor to ask for advice at the point of care. They need and want more senior clinicians' knowledge to help grow and improve their skills, to be as confident as possible and to practice at the highest level. Some may find themselves sending patients to the emergency department just because they do not yet have the training and experience to treat certain more complicated or even uncomplicated cases themselves. They need a mentor, fellow clinician, supervisory physician, or even a CUCM colleague to help them expand their knowledge to function at the highest level.

Why do we need to do this? One, it's the right thing to do. Two, our industry is experiencing "degradation of acuity" for just this reason. Fifteen to twenty years ago many Urgent Care centers were providing IV fluids, treating complicated lacerations and fractures, evaluating chest pain, dizziness and headaches. Now, partly due to lack of experience and comfort level of clinicians, and a variety of other reasons, many Urgent Care centers no longer do these things. We need to get back to our roots. This will result in a higher overall value of Urgent Care within the healthcare landscape, which may result in better reimbursement, better

reputation and long-term sustainability of our industry. Without that, we are destined to become retail clinics, primary care offices or simply disappear altogether.

The Urgent Care College of Physicians and the College of Urgent Care Medicine strives to provide relevant, up-to-date and quality educational materials like Urgent Caring to help expand your knowledge. In this issue you will find useful case reports, images, editorials and guidance specially tailored to the Urgent Care clinician. We hope not only will you learn a few useful tidbits, but that you will also pass it along to others. This is so important for the reasons I have outlined above. Remember, no matter how small, you never know how the information shared in a teachable moment will stick, and how it will pass along. With just one interaction you too could start a cascade that may help educate countless others. Trust me, it's a great feeling!

Tracey Quail Davidoff, MD, FCUCM
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Op-Ed: Ring Entrapment Management in Urgent Care: The Case for FDA-Registered Medical Devices

Kevin Spencer, MD[a] & Chris Cowper-Smith, PhD[b]

Introduction

Rings hold significant cultural and personal value and are worn by over 55% of the U.S. adult population.[1] Ring entrapment is a common yet potentially serious condition that regularly presents in Urgent Care settings. It occurs when swelling, trauma, or other physiological changes make a ring tight and difficult or impossible to remove without intervention. This can lead to Ring Tourniquet Syndrome, a finger-threatening and time-sensitive emergency.[2]

The complexity of removal depends on the techniques and tools used, the ring's material and the nature of the entrapment.[3,4] Newer ring styles and harder materials like titanium and tungsten carbide present challenges for legacy ring cutting tools, which are often unable to cut through these harder materials.[5] Modern ring cutters have largely overcome these challenges, and equipment selection is therefore important.[6,7]

Urgent Care centers now outnumber emergency departments in the United States by a factor of three, making them a primary access point for ring removal procedures. A 2024 survey of 800 adult ring wearers revealed 70% have experienced a stuck ring at some point, of which 26% required healthcare intervention. When asked where they would seek help in future ring entrapment cases, 91% indicated Urgent Care as a preferred choice.[1]

These findings underscore the importance of Urgent Care being well-equipped to manage ring entrapment cases safely, efficiently and in a manner that contributes to clinic operational success.

Have *You* Tried to Cut a Tungsten Carbide Ring?

The evolution of modern ring styles and materials adds complexity to ring entrapment, as many modern rings are too hard to be cut with traditional manual ring cutters, which were designed for softer metals like gold and silver. Common examples of harder ring materials that are difficult or impossible to cut with traditional ring cutters include titanium, tungsten carbide and stainless steel—as well as larger rings, and certain battery-containing smart rings.

Difficulties in ring removal can result in worsening finger swelling from unsuccessful attempts, delay of effective treatment, patient transfers, surgical interventions and in severe cases, finger amputation.[2,8,9]

The Role of FDA-Registered Medical Devices Versus Improvised Strategies

Complex algorithms and improvised techniques have emerged to address rings that resist traditional ring-cutting tools (5). For instance, repurposed hardware tools such as high-speed rotary tools (e.g., Dremels) and bolt cutters may be capable of cutting these metals; however, their use deviates from medical best practices and introduces significant risks including thermal burns, finger lacerations, and other complications.[8,10,11] Similarly, Vice Grips (locking pliers) have been described as a method to apply high forces in an attempt to shatter certain brittle ring materials.[11] However, this approach requires precise knowledge of the ring's composition, and improper execution can result in sharp fragments causing injury.[10]

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While improvised techniques may achieve ring removal, they fail to meet established medical safety and regulatory standards. Additionally, survey data suggest that healthcare professionals may face increased liability exposure if patient harm is linked to the use of non-medical tools in ring entrapment procedures.[1]

The FDA regulates ring cutters as Class 1 medical devices under CFR 880.6200:

"A ring cutter is a device intended for medical purposes that is used to cut a ring on a patient's finger so that the ring can be removed. The device incorporates a guard to prevent injury to the patient's finger."

The widespread availability of modern, electrically powered, FDA-registered ring cutters—specifically designed for harder materials like titanium and tungsten carbide—eliminates the need for improvised removal methods using repurposed, unregulated devices and significantly simplifies the need for complex algorithms because these tools can cut through any modern ring material.[7] Given the availability of FDA registered, made-for-purpose (MFP) devices designed for ring removal, improvised techniques, repurposed hardware store tools and unregulated devices should be avoided in clinical practice.

Ring Removal in Urgent Care

Patients presenting with a stuck ring often experience pain, progressive finger swelling and distress about the situation. In severe cases, finger ischemia may develop, increasing the urgency of removal. Timely intervention is critical and entirely feasible in Urgent Care settings with the right equipment and protocols.[2]

Adopting FDA-registered made-for-purpose (MFP) electric ring cutters with built-in safety protections allows clinicians to perform rapid, low-risk removals, often enabling delegation to non-physician healthcare staff. This approach reduces wait times, prevents unnecessary specialist referrals and minimizes complications, ultimately improving both patient outcomes and clinic efficiency.

Offering best-in-class ring removal procedures strengthens an Urgent Care center's reputation as a trusted clinician of emergency interventions, attracting new patients while fostering long-term retention for future medical needs. Given that Urgent Care clinics now outnumber emergency departments by a factor of three in the U.S., their role in handling common yet urgent procedures like ring removal is more important than ever.

Emerging Trends & Unique Cases

Newer electronic smart rings (e.g., Oura, Ultrahuman, Circular, RingConn) have grown in popularity in recent years. These devices contain internal batteries, introducing additional safety considerations, as cutting through the battery component may pose risks.

Many smart ring manufacturers provide guidance on safe removal, including battery landmarking and designated "safe cut" locations. Whenever available, manufacturer instructions should be reviewed before attempting removal, as they outline important safety considerations, such as areas to avoid (e.g., the battery) and recommended cutting locations. Some manufacturers publish these guidelines on their websites.[12]

Conclusion

Urgent Care centers play a critical role in the safe and effective management of ring entrapment cases. The availability and use of FDA-registered MFP ring cutters designed to cut through any ring material - including titanium, tungsten carbide and other modern rings - are essential for ensuring optimal patient outcomes. These MFP ring removal devices not only enhance procedural safety but are also designed to minimize complications such as thermal injury, finger ischemia and unnecessary patient transfers.

Disclosures:

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Op-Ed: Take Action to Protect our Healthcare Colleagues

Stefanie Simmons, MD, Chief Medical Officer, Dr. Lorna Breen Heroes' Foundation

Health workers are experiencing a mental health crisis. Nearly half of health workers experienced burnout in 2022, and health workers reported higher levels of poor mental health days, burnout, intent to change jobs and being harassed compared to all other types of workers. We see this in our colleagues and may even feel it ourselves.

Like everyone, health workers deserve the right to pursue mental health care without fear of losing their job. However, overly invasive mental health questions in licensing and credentialing applications prevent us from seeking support and may increase the risk of suicide. The fear from health workers that seeking mental health care may have a detrimental effect on their license or privileges is a primary driver that prevents care seeking.

Such questioning tends to be broad or stigmatizing, such as asking about past mental health care and treatment, which has no bearing on a health worker's ability to provide care and violates the Americans with Disabilities Act. In fact, The Physicians Foundation 2024 Survey of America's Current and Future Physicians found nearly half of physicians, residents and medical students were afraid to seek mental health care – or knew a colleague who was reluctant to do so – due to the questions on these types of applications.

Mental health questions were often added to licensing and credentialing applications out of a misplaced desire to protect the public from health workers who might not be fit to give care. Yet there is no evidence that these questions serve that function. On the contrary, when health workers' mental healthcare suffers, the quality of care they deliver suffers too. Research indicates medical errors can result from health workers experiencing burnout and mental health conditions. It is better to be diagnosed, treated and stabilized for any mental or physical health condition than it is to go untreated because of fears of stigma. We do not ask about health workers' history of diagnosed and treated physical health conditions and should not ask about mental health conditions either.

Fortunately, a number of national leaders have taken a stand with us at the Dr. Lorna Breen Heroes' Foundation, suggesting that systematic change is attainable. The American Medical Association, the American Hospital Association, the Federation of State Medical Boards, the Federation of State Physician Health Programs, the Joint Commission, the National Association Medical Staff Services, the National Association of Boards of Pharmacy, the National Committee for Quality Assurance and the National Institute for Occupational Safety and Health also all recommend against these overly invasive mental health questions.

As of today, over 500 hospitals have verified their credentialing applications do not include intrusive mental health questions—benefiting more than 115,000 credentialed health workers. Fifty-nine Go Health Urgent Care facilities have been verified. Additionally, 39 state medical boards, 1 state dental board, 1 state pharmacy board and 3 state nursing boards verified their licensure applications—benefiting more than 1.1 million physicians, dental professionals and nurses. Jackson and Coker Locums Tenens and Envision Healthcare also verified their internal applications and forms. Also, one insurance company, PacificSource Health Plans, verified their credentialing applications.

Your Urgent Care can be part of the community committed to health workers' wellbeing and mental health. Auditing and updating credentialing applications removes barriers to care, and communicating about this

change as a nationally recognized Wellbeing First Champion sends a clear message to your healthcare workforce that your organization supports their mental health and wellbeing.

To be recognized as a Wellbeing First Champion, login to access our free toolkit, resources and verification form to:

1. **Audit** all credentialing applications, addendums and peer review forms.
2. **Change** any invasive or stigmatizing language around mental health.
3. **Submit** your initial applications, renewal application and peer reference forms to verify they are free from intrusive questions.

Once we verify your applications, you will be recognized as a Wellbeing First Champion and be provided the Wellbeing First Champion Badge and Toolkit to communicate these changes to your workforce and assure them it is safer for them to seek care. The Badge serves as a visual recognition for health workers. When health workers are deciding in which state or organization to work, the Badge serves as a standardized form of communication that a location will not require health workers to answer intrusive mental health questions.

Together, we're going to remove one of the most substantial system barriers to health workers' wellbeing—intrusive mental health questions on credentialing applications.

Op-Ed: Will AI Ease the Adoption of Point-of-Care Ultrasound in Urgent Care?

Tatiana Havryliuk, MD

Key Words: point-of-care ultrasound, POCUS, artificial intelligence, AI-assisted ultrasound, POCUS adoption in Urgent Care

Point-of-Care Ultrasound (POCUS) has become a staple in emergency medicine, providing real-time insights to improve decision-making and guide procedures. But why has its adoption been so slow in Urgent Care settings? With advancements in affordable handheld devices, POCUS is well on its way to becoming the standard tool in Urgent Care. Could artificial intelligence (AI) accelerate this transition by providing real-time guidance for image acquisition and interpretation, making POCUS more accessible and reliable than ever?

The Current State of POCUS in Urgent Care

POCUS in Urgent Care is still in its infancy. It's mostly used in centers run by emergency physicians who have specialized training. You're more likely to see it in high-acuity centers or those that perform orthopedics procedures. But the reality is that there are no POCUS guidelines for Urgent Care, akin to the ones established by the American College of Emergency Physicians (ACEP) for the use of POCUS in emergency departments.[1] Although there are many case reports on the use of POCUS in Urgent Care, there are no large-scale studies showing the benefits of POCUS in Urgent Care.[2-4]

Even in the centers that use POCUS, it's often more of a "quick look" tool—a fast way to check for abscesses, joint effusions, or hydronephrosis. While it can be incredibly useful, this informal use leads to inconsistent documentation, missed billing opportunities and a lack of structured decision-making. So, how can POCUS become a more integral part of Urgent Care?

How AI Can Enhance POCUS Adoption

AI might just be the key to unlocking POCUS' potential in Urgent Care. Let's break down how it could help:

1. **Image Acquisition:** AI-guided scanning can help even the least experienced clinicians get diagnostic-grade images. Imagine a world where clinicians don't have to worry about positioning the probe correctly or getting the best view—AI can guide them in real-time. Many device manufacturers have adopted AI not only to assist with probe positioning but also in labeling images and performing calculations. A recent study found that with just 2.5 hours of training, non-ultrasound experts (including nurses and medical assistants) produced diagnostic-quality images 98% of the time.[6]
2. **Exam Interpretation:** AI-driven software can highlight pathology like pulmonary edema, deep vein thrombosis (DVT) or pericardial effusion. For novice users, this is a game changer, enabling them to confidently perform a preliminary interpretation with AI guidance, without needing immediate input from a POCUS expert.[7-8]
3. **Reporting:** AI can save time and improve documentation and billing compliance by automating image labeling and the reporting process. [7-8]
4. **Quality Assurance:** AI can enhance the quality assurance process by ensuring that exams meet diagnostic accuracy standards and are correctly interpreted. Artificial intelligence (AI) is

already being utilized in radiology to improve diagnostic accuracy and facilitate internal review.

5. **Standardization:** AI brings much-needed consistency, reducing the variability in image acquisition and interpretation that comes from different clinicians with varying levels of expertise.[7,8,9]
6. **Impact on Clinicians:**
    - **For Novice Users:** AI boosts confidence by offering real-time guidance and feedback, making the technology more accessible and user-friendly. This increased accessibility and support should motivate novice users to practice POCUS more often, accelerating their skill development and making ultrasound a seamless part of their clinical routine.
    - **For Advanced Users:** AI is a time-saver. It handles labeling, calculations and reporting, leaving clinicians to focus on the more complex aspects of care.

All of these advancements could pave the way for the broader adoption of POCUS in Urgent Care by overcoming the operational and training hurdles that have slowed its progress.

Caveats

But, as with any technology, AI has its limitations. Here's what to consider:

1. **Reliability Issues:** AI is only as good as the data it's trained on, and it can make errors. AI functions as a "black box," meaning that even experts may not fully understand how it arrives at specific conclusions. Furthermore, biases in the training data could be introduced and propagated, potentially leading to systematic errors that affect patient care.[9] It's essential that clinicians maintain oversight and critically evaluate AI-assisted interpretations.
2. **Training Limitations:** While AI is a great learning tool, nothing beats hands-on experience. For best results, AI-assisted scanning should complement a formal training program that includes hands-on workshops, asynchronous learning and exam review by an expert.
3. **Operator Dependence:** If a clinician doesn't have the right scanning technique, AI can't fix that. It's a tool, not a replacement for solid clinical skills. For example, if the operator is not fully compressing a deep vein due to poor technique, the AI software will erroneously interpret the exam to be positive for a DVT.
4. **Technology Dependency:** Over-relying on AI might erode fundamental acquisition and interpretation skills. Think of how some clinicians rely on machine-read EKGs without interpreting them themselves—AI could inadvertently lead to the same pitfall.

The Future of AI, POCUS and Urgent Care: A Game-Changer in the Making?

AI is here to stay, and it is transforming how POCUS is used in Urgent Care and beyond. By building confidence, improving efficiency and enhancing diagnostic accuracy, AI is making POCUS more accessible than ever. Increased utilization will allow novice users to develop skills faster, reducing barriers to adoption. At this stage, oversight remains essential to ensure accuracy and prevent biases from being introduced or propagated. However, as AI advances, we may soon find ourselves sitting back, sipping our coffee and letting AI do the work. And with patients already performing POCUS at home, there's no reason Urgent Care clinicians shouldn't be doing it—and doing it better![9-11]

About the Author:

Dr. Havryliuk is an emergency physician with over 15 years of clinical POCUS experience, past Emergency Ultrasound Director at Brooklyn Hospital in N.Y., and founder of Hello Sono. She is on a mission to empower clinicians with POCUS to take better and more efficient care of their patients.

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Designation Statement

The Urgent Care Association designates Urgent Caring 2025 Quarter 1 for a maximum of 1 A*MA PRA Category 1 Credit™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Accreditation Statement

This activity has been planned and implemented in accordance with the accreditation requirement and policies of the Accreditation Council for Continuing Medical Education (ACCME) through Urgent Care Association and the College of Urgent Care Medicine. UCA is accredited by the ACCME to provide continuing medical education for physicians.

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All other authors of CME eligible content have no relevant financial relationships to disclose.

The Art of Efficiency in Laceration Management: Tips for Urgent Care Clinicians

Patrick O'Malley, MD

Creator of *The Laceration Course,* An EBMedicine Publication

You work in a pressure cooker. Large volumes, charting, patient throughput concerns. A large laceration comes in and if not prepared, the rest of your shift can be a game of catch-up. Efficiency isn't just about saving time—it's about creating a seamless workflow that ensures the best outcomes for patients and sanity for you and your team. For laceration management, this principle is especially critical. By adopting a proactive approach and refining your techniques, you can streamline your practice, enhance patient satisfaction and optimize resource use. Here are key strategies to help you manage lacerations more effectively, inspired by the challenges and solutions identified by urgent care clinicians.

Why Efficiency Matters in Laceration Management

Improved Outcomes: Prompt, well-organized care reduces the risk of infection, dehiscence and poor cosmetic results.[1]

Patient Experience: A smooth and confident approach instills trust and comfort, minimizing patient anxiety during a potentially stressful situation.

Operational Flow: Efficient management prevents bottlenecks in the clinic, allowing more patients to be seen and treated effectively.

10 Tips for Efficient Laceration Management

Mentally Map Your Approach Early: As soon as you see a patient check in with a laceration, envision the steps required for assessment and repair. Anticipate the tools, supplies and potential imaging needs, thereby setting yourself up for success. Educate support staff as to what they can do to expedite care: updating the tetanus vaccination, cleansing the wound, medicating and grabbing supplies.

Prioritize Essential Assessments: Begin with critical elements like ABCs (airway, breathing, circulation), history and tetanus status. Conduct a quick visual evaluation to determine wound complexity and required supplies.

Prepare in One Trip: Gather all necessary materials—including sutures, anesthetics, irrigation equipment and specialized items like a stapler or extra gauze—in one trip to the supply area, minimizing interruptions and trips out of the room.

Optimize Anesthetic Wait Time: While the anesthetic takes effect, usually less than 5 minutes, maximize your efficiency. Use this downtime to chart, check on other patients or set up for irrigation and repair. Digital, facial and other regional blocks are fast and effective ways to provide anesthesia to

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a large area, minimizing needle sticks and pain and faster time to achieve anesthesia. A topical anesthetic such as LET takes longer to set in, 20-30 minutes. This can effectively "buy some time" to address other tasks. Giving anesthetic time to work ensures a less painful experience.[2] Setting a timer can serve as a useful reminder for when the anesthetic is expected to take full effect.

Organize Instruments for Workflow: Lay out instruments and supplies logically based on their sequence of use. This can be directly from the kit or arranged on a sterile drape in order to minimize clutter and reduce the likelihood of errors. Disposable laceration kits often have most supplies needed for a repair, excluding irrigation equipment, anesthetic and suture material and can be another source of time savings. These can be customized with the exact components desired by the clinic. The trade-off is lower quality instruments when compared to autoclaved instruments.

Plan for Contingencies: Before starting the repair, ensure everything is prepared for potential complexities, such as additional sutures or irrigation supplies, to avoid leaving the room mid-procedure. Better to have it readily available and not use it.

Adapt Irrigation Method: If the patient and wound location are amenable to irrigation at the sink, this can save valuable time and ensure adequate irrigation. Studies show no difference in infection rates when using tap water vs sterile solutions.[3,4]

Streamline Discharge Instructions: While repairing the wound, use this time to explain aftercare and answer questions. This may prevent unnecessary trips back into the room.

Maintain a Clean Workspace: Immediately dispose of sharps and tidy the area after completing the repair. Don't leave a mess for someone else to clean up, delaying room turnover. Cleanliness is important, but a "sterile field" is not achievable in the Urgent Care setting. Sterile gloves are not required.[5]

Embrace Flexibility: Efficiency doesn't mean rigidity. Be adaptable to interruptions, unexpected complications, or patient-specific needs, especially in a high-volume clinic.

The Efficiency Mindset: Efficiency in laceration management improves with experience. In Urgent Care, clinicians must balance multiple patients while ensuring optimal outcomes. Anticipating needs, keeping supplies accessible and using downtime to document and make dispositions help prevent a single procedure from disrupting the shift.

Efficiency also means precision. The goals of laceration repair are hemostasis, infection prevention and good cosmetic results. Knowing the appropriate number and spacing of sutures enhances both speed and effectiveness.

Practice is key. Regular use of suture training models and simulation tools builds confidence and proficiency, allowing for smoother execution in real-world scenarios. Improved technique leads to faster, more effective procedures without compromising care.

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Image Challenge: The Swollen Ear

Tracey Quail Davidoff, MD, FCUCM

A 65-year-old diabetic male presents to Urgent Care with a painful swollen ear for 12 hours. He is concerned because of the rapidity of onset of symptoms. He may have had a fever but was taking both acetaminophen and ibuprofen for pain, so he's not sure. The discomfort is beginning to give him a headache and make him feel generally ill. The pain is also radiating to his neck. He has a past medical history of poorly controlled diabetes.

Consider the following image

Solution on next page

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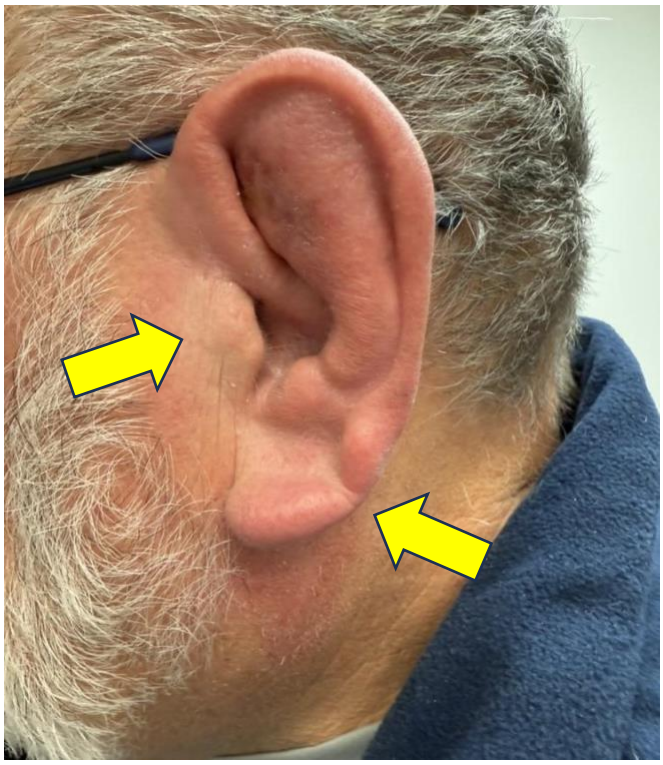
Image Challenge: The Swollen Ear

Solution



Differential diagnosis

- Otitis externa
- Cellulitis of the ear
- Acute mastoiditis
- Necrotizing external otitis

Physical exam

The patient's vital signs were normal except for a mild tachycardia of 105 bpm. On exam, the external ear was markedly swollen with redness extending anterior to the tragus and under the ear lobe. (See arrows) It was warm to the touch. The external auditory canal was swollen with mild exudate and no granulation tissue. It was painful to insert the speculum. The tympanic membrane was normal. There was no mastoid tenderness. No crepitus or fluctuance was felt. There was tenderness just behind the angle of the mandible where the redness was seen. There was no palpable lymphadenopathy.

Diagnosis

Cellulitis of the external ear due to extension of otitis externa.

This patient suffered from a relatively uncommon complication of otitis externa, cellulitis of the external ear. Otitis externa, although usually self-limited, can result in complications such as cellulitis, necrotizing external otitis and subsequent mastoid infection including osteomyelitis and extension to the meninges or brain . These complications are more common in older, male diabetics, especially those that are poorly controlled. The rapidly penetrating infection can result in cellulitis or necrotizing infection of the external auditory canal (EAC), the hallmark of which is granulation tissue at the bony/cartilaginous junction of the EAC. Patients may have edema, erythema and frank necrosis in this area. With extension to bone, patients may have mastoid tenderness, cranial nerve palsies and signs of meningitis. Typically, the pain is out of proportion to what one would expect with a simple otitis externa. Extension to deeper structures is a medical emergency and requires prompt treatment with anti-pseudomonal antibiotics and CT scan to rule out penetration into the skull. Surgical debridement may be required. Antibiotics generally used for cellulitis may be ineffective as they do not have coverage for pseudomonas. Pseudomonas sp. is a common pathogen in infections of the skin of the EAC and external ear due to colonization of those areas. Any infection of the external ear should be treated with an anti-pseudomonal antibiotic, generally a fluoroquinolone. Staph. aureus, coagulase-negative species, as well as fungi should also be considered. [3] [4] Most patients will require hospital admission.

Resolution

The patient was advised to report to the emergency department immediately for further management. He had a CT scan that was negative for penetration into the deep tissue and skull. He was given 24 hours of piperacillin-tazobactam with improvement of symptoms including resolution of fever and discharged on oral ciprofloxacin.

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The DOT Exam Column Obstructive Sleep Apnea Rick Nunez, MD

The Federal Motor Carrier Safety Administration (FMCSA) offers straightforward guidance regarding the certification of a driver with a diagnosis of obstructive sleep apnea (OSA) being treated with continuous positive airway pressure (CPAP). But what about a driver whose OSA is being managed with an oral appliance? What about drivers with OSA who have a hypoglossal stimulator in place? How does the examiner approach the certification of such individuals?

In 2021 the FMCSA addressed the certification of a driver using oral appliance therapy (OAT) for OSA. The FMCSA acknowledged that some drivers with sleep apnea can be treated with OAT if a sleep specialist has determined them to be good candidates based on the results of a sleep study. The appliance must be properly fitted by a dentist. Importantly, such devices should include a means of monitoring patient compliance; for example, newer models have various types of sensors that measure compliance. The minimum requirement for oral appliance usage is 4-5 hours a night for at least 5 days a week. For drivers new to OAT, initial certification should be up to 6 months.

Selective upper airway stimulation using an implanted hypoglossal nerve stimulator (e.g. the Inspire device) is an acceptable sleep apnea treatment for those unable to tolerate CPAP or unresponsive to CPAP. In the context of the DOT exam, a reasonable approach is as follows:

1. It is prudent to obtain medical clearance from the patient's sleep study physician verifying that the driver can safely operate a commercial motor vehicle (CMV).
2. Ensure that the device is effective for the driver. Clearance from the sleep study physician may be sufficient, but you might want to have the patient see their sleep study physician again after insertion of the device to ensure that it has effectively treated the OSA.
3. Typically, the driver must activate the device at bedtime via a remote control. You want to make sure that the driver is compliant with this. The driver's sleep study physician can print out a usage record to document that the driver is using the prescribed sleep apnea treatment (i.e., the stimulator device).
4. Confirm with the driver that s/he is not experiencing any excessive daytime sleepiness.

If you have any questions regarding the DOT exam or obtaining NRCME certification, feel free to email *mail@EMedHome.com*.

Rick Nunez, MD, is the medical editor for easyDOTexam.com and the NRCME training at EMedHome.com.

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Tricks of the Trade – Ear Foreign Body Removal

Cesar Mora Jaramillo, MD, FAAFP, FCUCM

Removing foreign objects from the ear canal is a common challenge in Urgent Care. Success in these situations hinges on a mix of the right techniques, the right tools and a keen understanding of each patient's unique needs. In Urgent Care, every day is an adventure! One moment, you could be diagnosing strep throat, and the next you're skillfully helping someone by extracting a foreign object from their ear. While these cases are frequent, they are never boring. They require not only technical expertise but also a degree of creativity and empathy to transform what could be a stressful experience into a manageable one.

Here is a quick trick to remove non-organic foreign bodies from the ear using a **tissue adhesive on a cotton swab or wooden stick**.

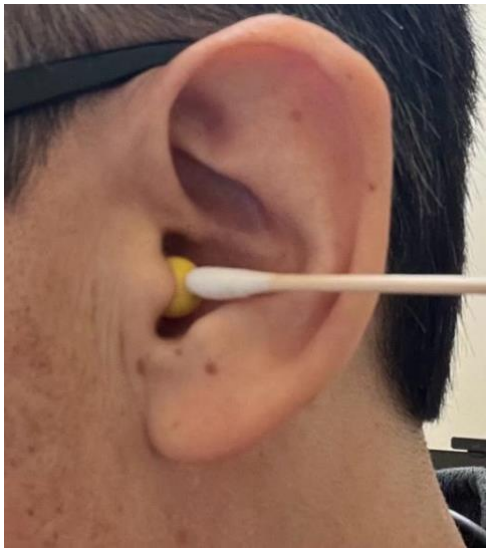
This is a method used for the removal of a foreign body that is smooth (non-graspable), small, round and does not pose an immediate risk of deeper impaction.

Let's walk through the process together.

First things first: it all begins with a careful examination of the ear. This helps in understanding what type of foreign object we're dealing with, its size and where exactly it's located. A gentle otoscopic exam will give us a clear view and confirm what's inside.

Once we have a good understanding, it's important to make sure the patient is comfortable and relaxed. Ideally, they should be lying down with the affected ear facing up and their head tilted slightly to allow for easy viewing of the ear canal.

Now, let's prepare the tool. A small amount of medical adhesive is applied to the tip of a cotton swab or a wooden applicator stick. It's crucial to find just the right consistency—too runny, and it might accidentally touch the sensitive walls of the ear canal. We want the adhesive to be slightly tacky for the best results. Do not apply too much tissue adhesive glue because it may drip into the canal and inadvertently stick the object to the ear canal.



Under direct visualization, gently touch the glue-coated swab to the foreign body. It's important to be gentle and minimize contact with the surrounding ear canal. We'll hold it there for about 10–30 seconds, allowing for a good bond to form. Once we feel the glue has adhered well to the foreign body, we can slowly and steadily pull the swab outward. Avoid excessive force to prevent the object from breaking or

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pushing further in. Be careful not to stick the swab to the ear canal or the tympanic membrane ™. You don't want to send the patient to ENT with a foreign body and a stuck cotton swab.

After the foreign body is removed, examine the ear canal and tympanic membrane to ensure complete removal. If there happens to be any glue residue left behind, that's usually okay. It typically sloughs off on its own, but if you prefer, it can also be carefully removed with a specialized medical adhesive remover.

This technique should not be used for organic foreign bodies like beans or seeds, since the moisture from the glue could cause them to expand. Also, be very cautious to avoid direct contact with the ear canal or the TM to prevent any injuries. If unsuccessful, do not attempt multiple times. Furthermore, this method might not be applicable to pediatrics, especially when the patient is not cooperative.

Another technique is ***Hook or Curette Extraction***. This method is helpful when dealing with firm objects that are easily graspable and located near the entrance of the ear canal. Gently use an ear curette, a right-angle hook, or even a looped wire to scoop or snag the foreign body. However, if you find yourself facing an object that's deeply embedded, it's best to steer clear of this technique.

On the other hand, if you're dealing with small, round and smooth objects, the ***Suction (Vacuum Method)*** can be your go-to. With this method, a small flexible suction catheter or a specialized ear suction device can work wonders. Just be sure to apply low suction pressure – this helps protect the ear from any injury. Again, this technique is not recommended for deeply impacted objects, so always assess the situation before proceeding. Remember, the key is to choose the right approach based on the object's characteristics and its location within the ear.

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Insights: Organizations Driving Innovation in Urgent Care Medicine

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Management of Nephrolithiasis in Urgent Care

Excerpted from: Burkall-Lewis RA. Management of Nephrolithiasis in the Urgent Care Setting. *Evidence-Based Urgent Care*. January 2025. © EB Medicine

Editor's Note: *The following content is a summarized excerpt from the cited article. It is not an exhaustive review of the condition but rather a focused highlight of the article's key points.*

Introduction

Nephrolithiasis, or kidney stone disease, has been documented for centuries. Modern data show that approximately 9% of the U.S. population will experience a kidney stone at some point in their lifetime, with a 50% recurrence rate within a decade.[1,2] Kidney stones are associated with an increased lifetime risk of chronic kidney disease and subsequent associated complications. A good understanding of the identification and management of nephrolithiasis is important to reducing morbidity and mortality associated with this increasingly prevalent condition.

Kidney stones, or renal calculi, form due to the supersaturation of urinary minerals. They can develop anywhere in the urinary tract and may lead to obstruction, inflammation and pain. The two primary mechanisms proposed for stone formation include free-floating crystal aggregation and deposition on Randall plaques in the renal papillae.[3-5]

The exact mechanism of kidney stone formation may vary based on composition:[3-5] Kidney stone composition as a percentage of presenting cases is estimated below.

- Calcium-containing stones (most common): 80%
- Uric acid-containing stones: 9%
- Struvite: 10%
- Cysteine: 1%

Identifying the makeup of kidney stones, which requires an understanding of stone formation pathways, can guide treatment and prevention strategies. Environmental, dietary, metabolic, anatomic and even genetic conditions all play roles.

Urgent Care Evaluation

History

A detailed history should assess pain characteristics, urinary symptoms, hematuria and systemic symptoms. In addition to reviewing past medical history and family history,[1-3]

the Urgent Care clinician should ask about the following factors:

- Onset, timing, quality and location of pain
- Determining the presence of lower urinary tract symptoms and hematuria
- Systemic symptoms such as fever, chills, or diaphoresis
- Any bowel habit changes
- Menstrual history and current pregnancy

Physical Examination

The physical examination should include abdominal and genitourinary assessments, particularly evaluating for costovertebral angle tenderness.[4,6] These features should also be included in the examination:

- General appearance
- Vital signs
- Musculoskeletal examination of the back
- Skin examination (hyperesthesia suggests herpes zoster)

Diagnostic Studies

Laboratory Testing

Most Urgent Care settings have access to urinalysis, which will guide further recommendations on testing.

- Urinalysis:
    - Presence of hematuria carries a sensitivity of 68.5% to 92.9% for nephrolithiasis, though specificity for hematuria is much lower (< 50%)[3,7]
    - pH
    - Signs of infection
    - Specific gravity and ketones
    - Crystals
- Consider urine culture
- Serum chemistry if concern of electrolyte abnormality or renal function is present[3,4]
- Uric acid levels (primary care workup and evaluation)
- Stone analysis (primary care workup and evaluation)

Imaging Studies

The consensus recommendation is that imaging should be performed for any patient with suspected nephrolithiasis, though the timing of imaging is not well studied.[1-3] Plain films are not generally helpful in acute management and evaluation. The European Association of Urology guidelines support the use of ultrasound for initial diagnosis in nonobese, adult patients aged <50 years without risk factors.[2,8,9] High-risk patients should be referred to the emergency department (ED) for CT scanning.[1,2,8] Low-risk patients should get definitive imaging within a week.[10]

Urgent Care Treatment

The goal of Urgent Care treatment for nephrolithiasis is to manage the pain associated with the condition and to promote the expulsion of the offending stone.

Pain Management

Nonsteroidal anti-inflammatory drugs (e.g., ketorolac, diclofenac) are first-line due to their analgesic and stone-expulsion properties.[1-3,11] Opioids may be considered for severe pain but carry risks of sedation and nausea.[11-13] Acetaminophen is an alternative for patients unable to take nonsteroidal anti-inflammatory drugs. **(See Table 1.)**

Table 1. Pain Management for Nephrolithiasis [2,11,12,14,15]

Medication	Adult	Pediatric	Important Considerations
Nonsteroidal Anti-inflammatory Medications			
Ketorolac	Patients ≥50 kg and aged <65 years: IV: 15-30 mg every 6 hours as needed (max <120 mg/day not to exceed 5 days) **or** IM: 30-60 mg or 10-30 every 6 hours (max <120 mg/day not to exceed 5 days)	Patients aged >4 years: IM/IV: 0.5 mg/kg/dose every 6-8 hours (max 30 mg/dose) There are no data available to support the use of oral ketorolac in pediatric patients	NSAIDs are first-line therapy May assist in expulsion of stone given mechanism of action Not appropriate in pregnancy Limited data in children for ketorolac and diclofenac Risk for adverse effects of bleeding, renal impairment and medication interactions Diclofenac may cause more bleeding and cardiovascular risk long-term Avoid in patients with kidney disease, peptic ulcer disease and patients who have had bariatric surgery Available in oral, IV and IM forms
	Patients <50 kg or aged ≥65 years: IV: 15 mg initial dose or 15 mg every 6 hours (max 60 mg per day) **or** IM: 30 mg or 10-15 mg every 6 hours (max 60 mg/day) **or** Oral: 10 mg every 4-6 hours (max 40 mg/day), to be initiated after IV/IM therapy		
Ibuprofen	IV/oral: 200-400 mg every 4-6 hours or 600-800 mg every 6-8 hours as needed (max <3.2 g/day)	IV: Children aged >6 months-12 years: 10 mg/kg/dose with maximum of 400 mg/dose (max <2400 mg/day) Children aged 12-17 years: 400 mg every 4-6 hours (max 2400 mg/day) **or** Oral: 4-10 mg/kg/dose (max 600 mg/dose up to every 6-8 hours, not to exceed 2400 mg/day)	

Diclofenac	100-150 mg/day PO in 2-4 divided doses (not to exceed 150 mg/day)	Children aged ≥12 years: Oral: Immediate release formulation 25 mg every 6 hours as needed	
Opioids[a]			
Morphine	IV: 1-4 mg every 1-4 hours as needed up to 10 mg every 4 hours for severe pain **or** IM[b]: 5-10 mg every 3-4 hours as needed	IV/SQ: Children aged >6 months and <50 kg: 0.05-0.1 mg/kg/dose every 2-4 hours as needed for relief. Children aged >6 months and ≥50 kg: 2-5 mg every 2-4 hours as needed	Second-line therapy Acceptable for use in pregnancy Increased risk for side effects such as sedation and gastrointestinal side effects Available in oral, IV and IM/SQ forms
Hydrocodone[c]	Combination therapies with hydrocodone and acetaminophen range from 2.5-10 mg/300-325 mg PO that can be taken every 4-6 hours (max not to exceed 60 mg/day of hydrocodone)	For the pediatric population, hydrocodone with acetaminophen combination (dosing based on hydrocodone): Children aged >2 years and <50 kg: Oral: 0.1-0.2 mg/kg/dose every 4-6 hours as needed for pain Children aged >2 years and ≥50 kg: 5-10 mg every 4-6 hours as needed	Limit to 1-3 day supply
Oxycodone	Oral immediate release: 5 mg every 4-6 hours with an increase to 15 mg every 4-6 hours if needed based on response; typical limit 30 mg/day outpatient	Children aged >6 months and <50 kg: 0.1-0.2 mg/kg/dose PO every 4-6 hours as needed (max 20 mg/day) Children aged >6 months and ≥50 kg: 5-10 mg PO every 4-6 hours as needed (max 20 mg/day)	Do not use extended release or long-acting preparations Limit to 1-3 day supply
Nonopioid Analgesic			
Acetaminophen	Oral: 325-650 mg every 4-6 hours or 1 g every 6 hours (max not to exceed 4 g/day) or IV: Adults ≥50 kg: 650 mg every 4 hours or 1 g every 6 hours as needed (max not to exceed 4 g/day) or <50 kg: 12.5 mg/kg every 4 hours or 15 mg/kg every 6 hours (max	Oral: 10-15 mg/kd/dose every 4-6 hours (max not to exceed 5 doses/day) or Rectal: <12 years: 10-20 mg/kg/dose every 4-6 hours (max not to exceed 5 doses/day) or IV: <50 kg: 15 mg/kg/dose every 4 hours as needed (max 3.75 g/day)	Second-line therapy Use caution in patients with liver disease Acceptable for use in pregnancy Available in oral, rectal and IV forms

	not to exceed 75 mg/kg/day or 3.75 g/day) or Rectal: 325-650 mg every 4-6 hours as needed (max not to exceed 4 g/day)	≥50 kg: 15 mg/kg/dose every 4 hours as needed (max 3.75 g/day)	

Abbreviations: IM, intramuscular; IV, intravenous; PO, orally; SQ, subcutaneous.
a Dosing for opioid-naïve patients with formulations most likely to be used for acute pain; higher initial doses may be required for opioid-tolerant patients.
b Not typically recommended due to variable absorption and delayed onset.
C Does not include combination therapies with nonsteroidal anti-inflammatory drugs, though these may be available as a treatment option.

Medical Expulsive Therapy

Although data supporting the use of medical expulsive therapy is controversial, treatment is recommended if no contraindications exist.[2] **(See Table 2.)**

Table 2. Medical Expulsive Therapy for Nephrolithiasis[2,16-24]

Medication	Adult	Pediatric	Important Considerations
Tamsulosin	0.4 mg PO daily for up to 4 weeks (0.2 mg in some clinical trials, 0.4 mg in guidelines)	Aged 2-4 years: 0.2-0.4 mg PO daily Aged ≥4 years: 0.4 mg PO daily	Recommended in current AUA/EAU guidelines Limited data may support use in pregnancy Contraindicated in patients with sulfa allergy May cause hypotension Limited data in children
Terazosin	2-5 mg PO at bedtime for up to 4 weeks	N/A	May cause hypotension

Abbreviations: AUA, American Urological Association; EAU, European Association of Urology; PO, orally

*Limited studies dosed doxazosin at 0.03 mg/kg PO daily in children.

Procedural Intervention

Procedural intervention is the initial treatment step in the following clinical scenarios:

- Presence of infection
- Acute compromise of kidney function
- Pain with obstructing stones that is not treated with conservative therapy
- Anuria

Urgent Care Disposition

Uncomplicated Nephrolithiasis

Patients can be discharged when:

- Pain is controlled
- A decision is made on initiation of medical expulsive therapy
- A plan is arranged for follow-up

Patients with high-risk comorbidities, complications, or for whom the diagnosis is unclear should be referred to the ED.[2] Follow-up care should include referral to a primary care clinician and urologist.

For additional information on the Urgent Care management of nephrolithiasis, please refer to the original article at www.ebmedicine.net

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Kids Do the Strangest Things: Pediatric Viral Gastroenteritis

Chris Merritt, MD, Gita Pensa, M and Michael Weinstock, MD

Pediatric Gastroenteritis

1. What is viral gastroenteritis?
    - It is acute diarrhea which often has nausea, vomiting and/or cramping and abdominal pain as a part
    - This is a clinical diagnosis
    - Many other diagnoses, such as appendicitis, may occur with the same symptoms[1]
2. What causes acute gastroenteritis?
    - This is usually a viral ideology
3. What is the work up of viral gastroenteritis?
    - This will depend upon the clinical condition of the child. Typically, labs are not necessary unless there is a suspicion of electrolyte disorders, renal failure or other complications
    - Consider checking a finger stick blood sugar in infants If there is a concern for hypoglycemia
4. How would we assess volume depletion in children?[2]
    - Decrease in urine output (urinating less often, decrease in number of wet diapers, dry diaper in the morning)
    - Increased heart rate or respiratory rate
    - Tenting of the skin
    - Decreased capillary refill
    - Lethargic behavior
5. Are clinical assessments reliable to diagnose dehydration?
    - There is no one single exam finding which is sensitive or specific for dehydration, so this should be a clinical diagnosis based on the entire constellation of symptoms
6. What findings on initial assessment would result in a consideration of referral to the emergency department (ED)?
    - Severe dehydration
    - An unwell appearance, including lethargic behavior or altered mental status should prompt a broad differential and possible referral to the ED
7. Can moderate dehydration be treated in the Urgent Care center?
    - Most cases of dehydration, including moderate, can be treated with oral rehydration and do not require IV rehydration

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- If an IV is required, usually 1-2 boluses of 20cc/kg is adequate to rehydrate a child

8. Should stool testing be routinely performed?[3]
    - Stool testing should be done when there is a suspicion for a diagnosis that is not simply a viral gastroenteritis concerning findings that might prompt stool testing, including blood or mucus in the stool as well as contact with persons who have been diagnosed with Shigella or Clostridium difficile or patients who have been on antibiotics with a significant amount of frequency of stools
9. Are dietary modifications helpful?
    - The recommendation for a BRAT diet (bananas, rice, applesauce and toast), or a bland diet, is not supported by the evidence
    - The diet should be advanced as tolerated
    - Avoiding dairy may shorten the duration of diarrhea, but only by about half a day
    - This should not apply to breastfeeding infants
    - If the only thing the child will drink is milk, then they should be encouraged to continue drinking milk
10. Are antiemetic agents indicated?[4]
    - The dose of ondansetron is 0.15 milligrams per kilogram with a maximum initial dose of 4mg
    - If there is no congenital predisposition to prolonged QT, it is unnecessary to check an ECG prior to administration
    - There is some evidence that ondansetron may decrease diarrhea and may even cause constipation
11. Is there any benefit to oral rehydration solutions?
12. Note that juice and soda are high in simple carbohydrates, and sugars may actually increase diarrhea
13. The best oral hydration is ultimately whatever the child will drink
14. Is there a role for anti-diarrheal agents?
    - Loperamide (Imodium) is an anti-motility agent but is an opioid and should be avoided in children--especially those under three years of age
    - Bismuth subsalicylate, which is under the brand name of Pepto Bismol, is an antisecretory agent but is not recommended in children less than 12 years of age because it contains salicylic acid which may be dangerous and also has a risk of overdose
15. Is there a role for probiotics or prebiotics?
    - There is limited utility to these agents, but they are likely safe
    - A large study in the New England Journal of Medicine did not find that they were effective[5]
16. Is the rotavirus vaccine safe and effective?
    - The vaccine is very effective and has decreased the incidence of rotavirus-associated gastroenteritis[6]

17. After the administration of oral fluids in the Urgent Care center for mild or moderate dehydration, is the patient safe for discharge?
    - The patient should trial oral fluids in the Urgent Care center, but vomiting is expected, and this is not an absolute indication for referral to the emergency department
18. What should be included in the discharge instructions?
    - Frequent feeding and fluids as tolerated and advance as tolerated. The primary goal is to increase the amount of fluids
19. When should the child return?
    - If a baby is not urinating at least one or two times a day, or has severe pain, blood in the stool, or lethargy, they should return immediately or go to the emergency department
20. What can be done to prevent spreading the virus to other family members?
    - Hand washing with soap and water
21. When can children return to school or daycare?
    - When they're vomiting and diarrhea is contained
22. Should a differential be documented?
    - It is helpful to document why you think a more serious diagnosis is *not* occurring

PEARL: Gastroenteritis is defined as acute diarrhea and vomiting. It is almost always viral and self-limited. The mainstay of treatment is maximizing oral rehydration.

Read the Full Article

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When Little Lungs Meet a Big Problem: *Mycoplasma Pneumoniae*

By Erin Pressley, PA-C

Unfortunately, my son was part of the initial *Mycoplasma pneumoniae* outbreak that hit in the fall of 2023. We had just returned from a family cruise – bringing back more than just souvenirs. While most of my family tested positive for COVID post-cruise, my son kept testing negative. However, his cough and fever lingered just enough to keep my PA instincts and mom radar on high alert.

Let's dive into reviewing a condition that has made an unwelcome comeback and caused quite a stir among our pediatric patients since 2023: **Mycoplasma pneumoniae**.

A Small Microbe with a Big Attitude

Mycoplasma pneumoniae is notorious for causing atypical community-acquired pneumonia, especially among school-aged children. This unique bacteria is sneaky. It latches onto a host cell, releases a toxin that is believed to cause inflammation and then replicates inside of a cell. The kicker? Mycoplasma has no cell walls, making it resistant to the common antibiotics we typically use to target cell walls (looking at you, beta-lactams).

Signs & Symptoms

The Mycoplasma pneumoniae infection onset is often gradual, with an incubation period of 1-4 weeks. The symptoms are similar to upper respiratory tract infections and include:

- Fever
- Persistent dry cough (weeks to months)
- Dyspnea
- Fatigue
- Headache
- Sore throat
- Abnormal auscultation (+/- rhonchi or expiratory wheezes)

Chest X-rays may show nonspecific changes like a consolidation or patchy infiltrate that make you think, "Is that an infiltrate, a shadow, or am I just seeing things?"

Diagnosis: "Guess Who?"

Serology and PCR tests are available, but they're not always practical or timely in the Urgent Care setting. So, ask yourself: Would these results change my management? Most of the time, diagnosis is based on clinical suspicion. If it looks like a duck, walks like a duck, well… you know the rest!

Treatment — Azithromycin…Really?

Once you've deduced that your pediatric patient is likely suffering from Mycoplasma pneumoniae, it's time to talk about antibiotics. Macrolides, such as azithromycin, are the go-to choice for this pesky pathogen.

If macrolide resistance is a concern, alternatives like tetracyclines or fluoroquinolones can be considered – but these should be avoided in younger children whenever possible.

At the end of the day, knowledge is power. As Urgent Care clinicians, it's important for us to be aware of the current outbreaks. Don't forget to keep Mycoplasma pneumoniae on your radar as a differential when your next pediatric patient presents with that cough that just won't quit. Jump more into Mycoplasma pneumoniae and more in Urgent Care RAP here.

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Urgent Updates

MARCH - WEEK 3 (03/20)

Male-Partner Treatment to Prevent Recurrence of Bacterial Vaginosis

This open-label, randomized, controlled trial involved couples in which a woman had bacterial vaginosis and was in a monogamous relationship with a male partner showed that the addition of combined oral and topical antimicrobial therapy for male partners to treatment of women for bacterial vaginosis resulted in a lower rate of recurrence of bacterial vaginosis within 12 weeks than standard care. **Full Access:** NEJM

Current Dengue Outbreak

In the United States, public health authorities in Puerto Rico and the U.S. Virgin Islands have declared dengue outbreaks. Locally acquired dengue cases have been detected in Florida, Texas, Hawaii, Arizona, and California. Large outbreaks of dengue can increase the risk the number of dengue cases in US travelers. Because of the increased number of travel-associated cases and because the types of mosquitoes that spread dengue are present in some areas of the United States, small outbreaks might occur. **Full Access:** CDC

Report Ranks U.S. Cities for Challenges Living With Allergies

More than 100 million people in the United States live with various types of allergies every year.[1,2] Many of them have seasonal pollen allergies. The Asthma and Allergy Foundation of America's (AAFA) yearly Allergy Capitals report explores how challenging it is to live with seasonal allergies in the top 100 U.S. cities. **Full Access:** AAFA

Tailored Adherence Incentives for Childhood Asthma Medications - A Randomized Clinical Trial

In this randomized clinical trial of 99 school-aged, adherence to inhaled preventive medications was temporarily boosted by a financial incentive-enhanced mobile health intervention, though there was no evidence of enduring behavior change. **Full Access:** JAMA

WEEK 4 (03/27)

Probiotics and Fever Duration in Children with Upper Respiratory Tract Infections - A Randomized Clinical Trial

In this randomized clinical trial involving 128 children with upper respiratory tract infections (URTIs) URTIs, the probiotic mixture shortened the duration of a fever by 2 days, a statistically significant difference compared with placebo. The findings suggest that probiotics are helpful in the treatment of pediatric URTIs. **Full Access:** JAMA

Infection Prevention and Control Measures for Multidrug-Resistant Organisms: A Systematic Review and Network Meta-Analysis

PubMed, Embase, MEDLINE, Cochrane Library, and CINAHL were searched to assess the effectiveness of infection prevention and control measures combating multidrug-resistant organisms (MDROs). Researchers found that the optimal interventions to reduce the acquisition, infection, and colonization of MDROs vary within the hospital setting. These interventions must be tailored according to the specific intervention implemented and the type of resistant strain involved. **Full Access:** Springer

Removing Ineffective Drugs from the Market - Implications for Oral Phenylephrine and Beyond

When evidence shows that a long-approved medication is ineffective, should it remain available if there are no concerns for harm? The recent case of oral phenylephrine opens this discussion with multiple repercussions. **Full Access:** JAMA

Non-invasive monitoring of humoral immune responses in men with acute Chlamydia trachomatis urethral infection using first-catch urine

Researchers investigated the relationship between Chlamydia trachomatis (CT) load and anti-chlamydial antibody using first-catch urine from men with nongonococcal urethritis. Genotype-specific differences in CT load, clarify that partial immunity associated with repeat infections is not antibody-mediated, and demonstrate a method to monitor humoral immune responses to CT in men using non-invasively collected urine. **Full Access:** Journal of Infectious Disease

Educational Material to Caregivers of Children Diagnosed with Pneumonia

Murphy L, Huang N, Kandasamy S, et. al. Effectiveness of caregiver educational materials for pediatric community-acquired pneumonia in the emergency department: a qualitative study. Canadian Journal of Emergency Medicine (2024) 26:784–789
https://doi.org/10.1007/s43678-024-00777-2

In the busy environment of Urgent Care there can be discrepancies between parental expectations of antibiotic treatment and clinician's requirements for safe delivery of care with appropriate Antibiotic Stewardship. This was a qualitative study to explore the care characteristics, goals, perspectives and wants of caregivers navigating childhood illness and antibiotic use.

The authors noted from the interviews that the most effective educational materials provided to caregivers were visually attention-grabbing, simple in content and in formats they could reference following their visit.

Editor's Comments: This study reinforces previous research around the type of content and method of delivery to caregivers. However, a major limitation of the study was its small number of participants interviewed and the single area with a non-diverse population which will limit generalizability. There are some takeaway points regarding meeting caregiver emotional needs that Urgent Care clinicians would be useful to consider during our daily consultations.

Point-of-care Ultrasound (PoCUS) for the Diagnosis of Hip Effusion

Katz-Dana H, Stackievicz R, Dana E, et. al. Diagnostic accuracy of point-of-care ultrasound (PoCUS) for the diagnosis of hip effusion in the pediatric emergency department. Canadian Journal of Emergency Medicine (2024) 26:875–882
https://doi.org/10.1007/s43678-024-00788-z

A limping child who is reluctant to bear weight is a common presentation to Urgent Care and the emergency department. This was a single-center, prospective observational study, comparing PoCUS assessment by pediatric emergency medicine physicians, with a synchronous radiologists' scan reviewed by a pediatric radiologist (reference standard).

The results showed an excellent agreement between the PoCUS and radiology ultrasound results (kappa = 0.81, 95% confidence interval [CI] 0.70–0.93). PoCUS performed by pediatric emergency medicine physicians had a sensitivity of 89.8% (95% CI 77.7–96.6%), specificity of 91.3% (95% CI 79.2–97.5%), positive predictive value (PPV) of 91.5% (95% CI 81.1–96.5%), and a negative predictive value (NPV) of 89.6% (95% CI 85.05–93.74%). The positive likelihood ratio was 10.33 (95% CI: 4.03–26.47), and the negative likelihood ratio was 0.11 (95% CI: 0.05–0.26).

Editor's Comments: This study provides some encouraging data that the use of PoCUS can be effective in diagnosing hip effusions when used by an appropriately trained operator. Upskilling Urgent Care clinicians in PoCUS can benefit patient care by providing additional services that may help reduce unnecessary emergency department referrals and transfers.

Nirsevimab Effectiveness in Severe Respiratory Syncytial Virus Infection

Lopez-Lacort M, Munoz-Quiles C, Mira-Iglesias A, et al. Nirsevimab Effectiveness Against Severe Respiratory Syncytial Virus Infection in the Primary Care Setting. Pediatrics. 2025;155(1): e2024066393

Respiratory Syncytial Virus (RSV) is the primary cause of chest infections in children <5 years. This was a study based in Spain where patients presenting with respiratory infections were swabbed and those who

were negative for RSV serology were deemed test negative cases. Nirsevimab status was identified via the vaccination registry.

The results from extrapolation of data showed that nirsevimab was 76% effective in preventing medically attended RSV-LRTI (lower respiratory tract infections). It was observed in this study that catch-up administration of nirsevimab demonstrated greater effectiveness in preventing cases compared with the seasonal program.

Editor's Comments: There were wide assumptions made in this study to extrapolate data for its conclusions. This was evident by the wide confidence intervals for the results. RSV identification is not regularly performed in the community, which may result in an overestimation of the effectiveness of nirsevimab in this study. Therefore, although it is pertinent to encourage vaccination for prevention of disease, this study's results need to be considered within the context of its methodology and limitations.

Sports-Related Concussion

Leddy J. Sports-Related Concussion. N Engl J Med 2025; 392:483-93. DOI: 10.1056/NEJMcp2400691

Sports-related concussion, defined as a traumatic brain injury caused by a direct blow to the head, neck or body resulting in an impulsive force being transmitted to the brain that occurs in sports and exercise-related activities, are increasing presentations to Urgent Care. This article is an education piece with a clinical vignette which addresses some of the present knowledge on the condition and the evidence to support treatment strategies.

The key points of sports-related concussions:

- Mild traumatic brain injury normally lasts a few weeks with rare exceptions that last >1 month
- Signs and symptoms appear within 72 hours of injury and can include vestibular and oculomotor findings. These rarely require any further adjunctive tests
- Soft tissue neck injuries often accompany this condition and if left untreated can delay recovery
- Pre-existing psychosocial conditions may be exacerbated by concussion and in some cases delay recovery
- Light physical activity and graduated aerobic exercise in the first 48-72 hours of diagnosis can help facilitate recovery and reduce the persistence of symptoms

Editor's Comments: This is a good aide-memoire for Urgent Care clinicians to help with treatment and advice given to young athletes presenting with sports-related concussions. The latest evidence against cocooning also highlights the rapid nature of changing science and the way this condition is now better understood.

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Abstracts in Urgent Care Section Editor, Journal of Urgent Care Medicine

Updates from the Colleges

2025 Q1 CUCM and UCCOP Committee Report

As a new feature in this edition of Urgent Caring, the editors thought it would be helpful for you, our members, to be informed about what our committees are actively working on, and the progress we are making on our various initiatives. We encourage you to become more active in our organization and join a committee or active task force. You too can make a meaningful difference in shaping the future of Urgent Care medicine. Contact Samantha Wulff at swulff@urgentcareassociation.org to find out more.

Advancing the Specialty Committee: Chair, Joseph Toscano, MD, FCUCM

Several UCCOP members are participating in an ongoing American College of Emergency Physicians Task Force examining how Urgent Care fits into the healthcare landscape as an industry and a discipline. This recognition of the UC space by another specialty is groundbreaking and we're hopeful it will lead to wider acceptance and validation of the specialty.

Fellowship Committee: Chair, Tracey Quail Davidoff, MD, FCUCM

Three new individuals have successfully met the criteria to be considered Fellows in the College of Urgent Care Medicine. We would like to congratulate Timothy Dykstra, MD, FAAFP, FCUCM, Paul Hansen, MD, FAAP, FACP, FCUCM and Erin (Brooke) Madison, APRN, MSN, NP-C, FCUCM for joining the ranks of our distinguished Fellows who are dedicated to the practice of Urgent Care medicine.

Awards Committee: Chair, Sean McNeeley, MD, FCUCM

The Awards Committee reports this year that Lindsey Fish, MD will be receiving the Joseph Toscano, MD, FCUCM Inspiring Excellence Award, and Kevin Reiter, MD will be receiving the Sean M. McNeeley, MD, FCUCM Advancing the Specialty Award. We would like to honor them for all their hard work within the College and the Urgent Care community and congratulate them on this achievement. These clinical awards will be given in person at the 2025 Urgent Care Convention in Dallas, at the Clinical General Session on Tuesday, May 6.

American Medical Association (AMA)/Specialty and Service Society (SSS): Representative, Lindsey Fish, MD

As part of the work of the Advancing the Specialty Committee, the Urgent Care College of Physicians (UCCOP) applied and was accepted into the American Medical Association's Specialty and Service Society. This is the first time that Urgent Care medicine has had representation in the AMA and a voice in the House of Medicine.

Clinical Advisory Group (CAG): Chair, Lindsey Fish, MD

The Clinical Advisory Group (formerly Clinical Consortium) has continued with quarterly meetings advancing subcommittee work on a program to reduce clinician burnout, create quality metrics, and reduce clinical waste. Additionally, planning has begun for our annual in-person meeting July 12 – 14 in Phoenix, Ariz. where we will assess our progress on the initiatives established in 2024 and look to new opportunities for the next 12 months.

Health Disparities Task Force: Co-Chairs Cesar Mora Jaramillo, MD, FAAFP, FCUCM and Erin Loo PA

The Health Disparities Task Force was created during the Clinical Advisory Meeting in 2024 with the objective of addressing inequities in patient care and outcomes. Since its inception, the committee has created a charter and is working on creating an innovative toolkit designed to equip clinicians with essential strategies for recognizing, addressing, and reducing these disparities, ensuring equitable and patient-centered care in Urgent Care settings.

The framework, Partner, Educate, Engage, and Research (PEER,) emphasizes partnering with key organizations for systemic change, educating clinicians on patient-centered care, engaging in advocacy efforts within Urgent Care organizations, and promoting research on health disparities.

Urgent Caring: Editors-in-Chief, Tracey Q. Davidoff, MD, FCUCM and Cesar Mora Jaramillo, MD, FAAFP, FCUCM

Urgent Caring continues to produce high quality CME for its CUCM and UCCOP members. We need more members to help us continue the mission. If you are interested in writing an article or participating in content peer review, please contact Samantha Wulff at swulff@urgentcareassociation.org to see how you can get involved.

Urgent Updates (U2): Chair, Cesar Mora Jaramillo, MD, FAAFP, FCUCM

The Urgent Updates Committee is committed to providing timely, relevant, and impactful information about Urgent Care. Through our biweekly updates, we share the latest Clinical headlines to keep you informed. Don't miss out—stay connected, stay informed and lead in Urgent Care excellence!

Clinical Response Committee (CRC): Chair, Jasmeet Bhogal, MD, MBA, FCUCM

The CRC meets twice monthly to discuss hot topics in Urgent Care Medicine (UCM) and how they affect our clinical practice. The committee reviews issues such as COVID-19, Best Practices in UCM, drug recalls and emerging issues, and more. The members of this committee are CUCM physicians, nurse practitioners and physician assistants with the highest level of experience and knowledge in the practice of UCM. Current topics of discussion include the use of antivirals in Influenza, pediatric reactions to ceftriaxone, competencies, testing and treating of STI's, identification of sepsis and the importance of vital signs. Best practices, white papers, and other information from the committee can be found here: https://urgentcareassociation.org/college-of-urgent-care-medicine/

Stewardship Task Force: Chris Chao, MD, Chair

The newly formed Stewardship Task Force was established by the Clinical Response Committee to address, educate, and determine best practices for antibiotics, corticosteroids, radiographs, and even laboratory testing in Urgent Care Medicine (UCM). Meeting twice monthly, expect to see educational materials, Best Practices, and more on these topics to help you practice responsibly.

Post-Graduate Fellowship Program Accreditation Committee: Jasmeet Bhogal, MD, MBA, FCUCM, Chair

The Post-Graduate Fellowship Committee oversees clinical fellowships endorsed by the CUCM to ensure they are educating fellows in UCM with the Standards established by the College demonstrating a formal and disciplined fellowship program. Currently, four organizations have achieved the CUCM Accreditation distinction: CityMD, MedStar Health Urgent Care, Northwell Health – GoHealth Urgent Care, and WellNow Urgent Care. These organizations have demonstrated fellowships designed for clinicians who wish to have more education in the of the specialty of Urgent Care medicine so they may practice with confidence at the highest level.

Nominating Committee: Lisa Bishop, DNP, FCUCM

The Nominating Committee is hard at work identifying potential candidates for the Board of Directors of the CUCM and UCCOP. There will be three open positions to be filled this year. The election will open via an email notification with a voting link to each member of the College on April 14, 2025. It will close during the Urgent Care Convention on May 6th, 2025. Any individual member who is a PA, NP, or physician is a member of the College. Physicians, PAs and NPs who have been designated to receive benefits under an organizational membership will also receive a ballot. We encourage our members to vote and have a voice. One member. One vote. If you are unsure if you are a member, contact membership@urgentcareassociation.org to confirm or be added to your organization's roster.

CAUSE FOR APPLAUSE Q1 2025

The College of Urgent Care Medicine is pleased to announce three new Fellows since the last edition of Urgent Caring. Congratulations to Brooke Madison, APRN, Timothy Dykstra, MD, and Paul Hansen, MD for earning the FCUCM distinction.

Erin Brooke Madison, APRN, MSN, NP-C, FCUCM (Brooke). Brooke has been a Nurse Practitioner with Little Spurs Pediatric Urgent Care in San Antonio, Texas since 2019 where she provides assessment, diagnosis, treatment, and education to acutely ill children ages 0-21 years. She is also on the faculty of the University of Incarnate Word as an Adjunct Clinical Instructor. Brooke served on a medical mission team to care for children pre- and post-cardiac surgery in Gaza in 2015 and returned as an APRN volunteer at a Refugee Clinic in San Antonio. Her nursing degree was attained from Union University in Jackson, TN and she earned her Master of Science in Nursing from UT Health, San Antonio. She graduated magna cum laude from each.

Timothy Dykstra, MD, FAAFP, FCUCM. Dr. Dykstra serves as the Urgent Care Medical Director for the Premier Health/ Mercy One joint venture in the state of Iowa. He is Board Certified in Family Practice through ABFP and has an extensive background working in Family, Emergency, and Occupational Medicine. Dr. Dykstra completed his undergraduate degree in biology (major) and chemistry (minor) at Central College, Pella, Iowa, and attained his Medical Degree from the University of South Dakota. He completed his Family Practice residency at Iowa Health Systems in Des Moines.

Paul Hansen, MD, FAAP, FACP, FCUCM. Dr. Hansen has served as the National Chair of Clinical Quality for GoHealth Urgent Care since January 2022 and recently assumed additional responsibilities as the Interim Physician Lead for the State of Missouri with Mercy GoHealth. In 2021 Dr. Hansen was awarded as the Researcher of the Year. He has published on clinical delivery in Urgent Care medicine, including the important topic of systemic steroid stewardship. Dr. Hansen did his undergraduate studies at Maryville University, St. Louis Missouri, and received his Medical Degree from the University of Missouri School of Medicine

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URGENT CARING

A PEER-REVIEWED PUBLICATION

Empowering Clinicians, Enhancing Quality of Care

SECOND QUARTER, 2025 Volume 9, Issue 2

Published quarterly and includes editorials, case studies, best practices, imaging challenges, expert insights, tricks of the trade, Urgent Updates and more...

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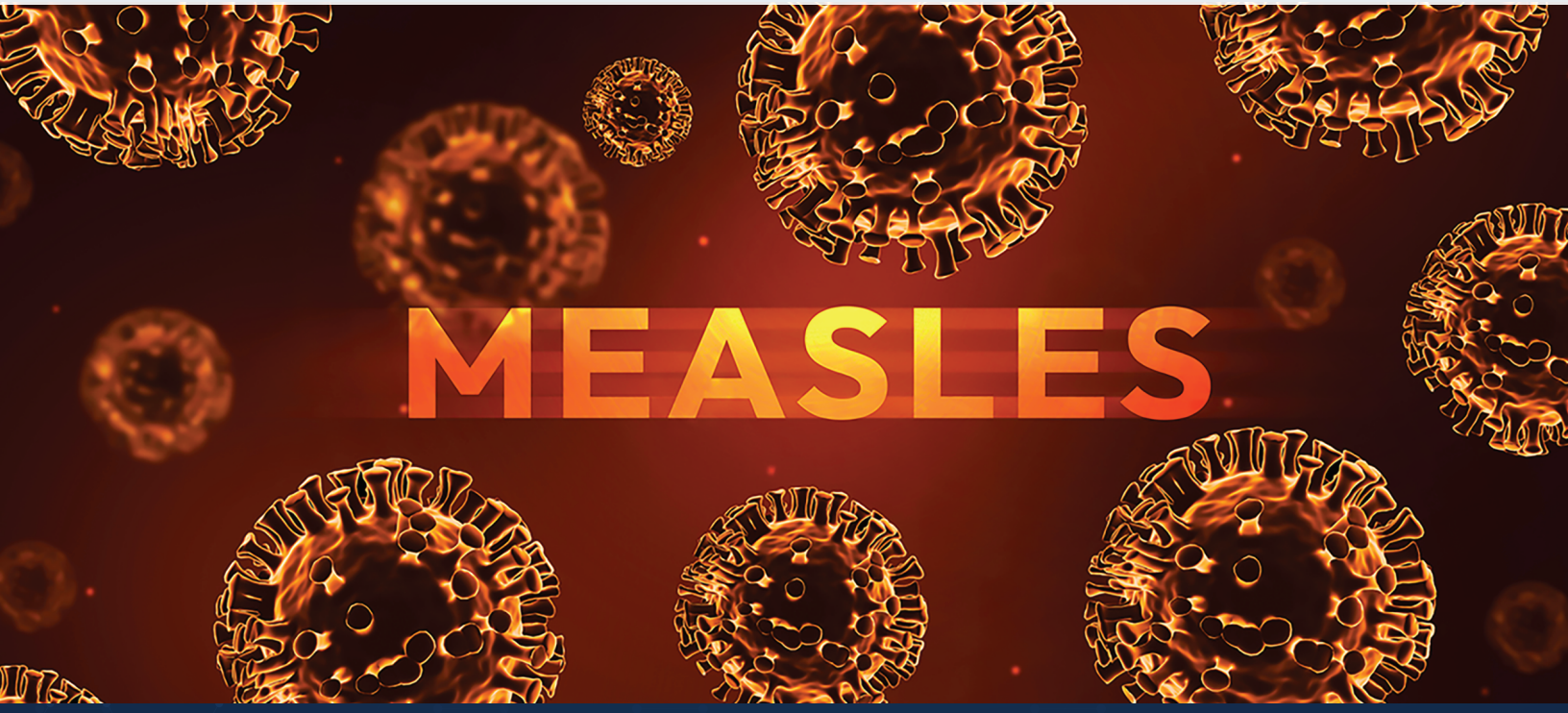

URGENT CARE COLLEGE OF PHYSICIANS

COLLEGE OF URGENT CARE MEDICINE

A publication of the Urgent Care College of Physicians in collaboration with the College of Urgent Care Medicine.

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From the President of the College

Urgent Care Convention

Cesar Mora Jaramillo, MD, FCUCM

It was great to see many of the hard-working Urgentologists attending the Urgent Care Conference in Dallas. The clinical sessions were highly educational, and the hands-on workshops focused on common Urgent Care visits.

The Clinical Track delivered a high-impact lineup of sessions designed to meet the evolving needs of frontline clinicians. Highlights included "engaging overview of pediatric respiratory illnesses," "guidance on pediatric antibiotic stewardship" and "hands-on application of point-of-care ultrasound in Urgent Care settings." The Convention also featured valuable international perspectives, with presenters sharing Urgent Care delivery models and innovations from the UK and Australia.

It was inspiring to witness so many Urgent Care professionals coming together with the objective of learning, enhancing their knowledge and skills, networking and – for the speakers – sharing passion and expertise. I am truly grateful to work alongside the best! We Urgentologists are an example of efficiency, adaptability, resilience and most importantly, we practice in a setting where we decide who can go home or who needs a higher level of care. Our skill set sets us apart from other specialties.

New CUCM Board Members and New UCCOP Officers

I know it has been over a month since the Convention, but I would like to highlight a few things. The College of Urgent Care Medicine has three new board members: Erin Loo, PA-C (an incumbent), Lyndsie Watkins, PA-C, FCUCM and Patrick Dolan, MD, FCUCM.

Lyndsie Watkins, PA-C: "I have been slowly getting more involved in the CUCM over the past year or two and found the work being done so valuable and important to the industry. With this, paired with my passion for driving quality through best practice guidelines and clinician training, I felt running for the board was a wonderful opportunity to help be part of the discussions and initiatives created. I'm honored to have been elected and look forward to doing the work that keeps raising the bar in Urgent Care."

Patrick Dolan, MD: "As a board member, I look to support clinical practice excellence, a core tenet of CUCM. To achieve this, we will need to as put forth by the College set competencies, cultivate updates and guidelines, and publish the work being done."

Erin Loo, PA-C: "Having served on the CUCM Board of Directors for the past three years, I am eager to continue in this role to advocate for Advanced Practice Clinicians (APCs) in Urgent Care. I have been continually inspired by the dedication and innovation of my colleagues, and I believe that our

collaborative efforts are essential to strengthening and advancing the specialty. I look forward to continuing this important work and further contributing to the growth and impact of Urgent Care medicine.

Furthermore, I would like to congratulate the newly selected officers of UCCOP: Lindsey Fish MD - Vice President and Joe Toscano, MD, FCUCM- Treasurer. Their commitment and passion to the field is truly inspiring. I am very excited to work with such a talented group and can't wait to see what we accomplish next."

UCCOP Research Committee

I'm excited to share that we have officially created a Research Committee under the UCCOP umbrella. As many of you know, research grant funding began in 2022, with the majority of those early grants directed toward projects in clinical Urgent Care. Recognizing the critical need for ongoing, high-quality research in our field, it became clear that UCCOP was the ideal home to continue driving this important work forward—particularly as the Urgent Care Foundation (UCF) begins to shift its strategic focus toward education and public awareness initiatives.

This committee will play a key role in shaping the future of Urgent Care research by identifying priority areas, developing a timeline for funded projects and ensuring alignment with the evolving needs of our field. Research is a cornerstone of any medical specialty. For Urgent Care to continue growing, earn credibility and secure its place within the greater healthcare landscape, we must generate data that supports our field.

We're thrilled to see UCCOP stepping into this leadership role and look forward to the future ahead of us. If you have ideas or would like to be involved in the research efforts, we welcome your voice and participation.

AI in Urgent Care – Are We Ready?

On another note, a brilliant Urgent Care physician—whose name I won't mention, but many of you likely know—raised the topic of the increasing use of AI and how it could impact Urgent Care clinicians. While there are concerns about AI replacing human jobs, there is also potential for AI to help us improve and enhance our services. How can we ensure that we utilize AI technology to assist us rather than replace us?

Let's take a look at our friends, the radiologists. Our colleagues in radiology have experienced similar concerns, fearing that AI could be a foe instead of a tool. However, AI has proven to be a powerful medical tool that increases efficiency and enhances human capabilities rather than replacing jobs.

Some organizations utilize AI tools that have been researched, tailored and specifically designed to fit the workflows of clinicians. We should leverage this technology to our advantage and become better and more efficient in our roles. For instance, the Mayo Clinic is utilizing more than 250 AI models, particularly in its radiology and cardiology departments. Furthermore, it is fascinating to

learn how AI analyzes EKGs to predict which patients are more likely to develop atrial fibrillation, heart rhythm abnormalities or even heart attacks.

After reading articles on this topic, I wonder whether we, as Urgent Care clinicians, should take the lead in incorporating AI into our field, tailoring it to make us better clinicians and more efficient in our work. We have repeatedly demonstrated that Urgent Care is adaptable and resilient. It is essential to start discussing our future as AI advancements continue to evolve.

From the Editor in Chief

Tracey Quail Davidoff, MD, FCUCM
Editor-in-Chief

This was a really hard letter to write, mostly because Dr. Jaramillo wrote on all the topics I was planning on addressing! But seriously, coming up with meaningful and useful information for our readers is a task I take very seriously.

We have some great content in this edition of Urgent Caring, with some really cool images! A case report on Bell's palsy, a medication reaction, renal colic, a best practice on paronychia, some DOT exam information, an interview with an ENT, original research (with sobering results) on the comfort level of clinicians doing procedures and finally some much needed information about the recent hot topic of measles. All are very useful and timely articles. We hope you enjoy the content and collect the free CME.

I wanted to talk to you about the value of testing in Urgent Care. I think the COVID pandemic has created a culture of testing our patients. Patients present with respiratory symptoms, and they want to know what it is that is causing their symptoms. The medical assistant or nurse tests the patient for the "trifecta" of COVID, influenza and strep before the clinician even lays eyes on the patient's medical record. Now out of the interest of time, this makes sense. We can run in the room, tell you what you do or do not have, recommend some treatment and go write our note. But is this really the best practice?

We all know that streptococcal pharyngitis rarely occurs in older persons. We also know that it usually does not present with a cough and congestion. How many people over age 50 with congestion and cough and no strep exposure would you have to test to get one positive strep test in a patient that truly has strep? I doubt if anyone has studied that. Their Centor score is -1, they should not be tested. And if they do have a positive strep test, do they really have strep? Should it be treated? We all like to think our tests are 100% sensitive and 100% specific. This means that if you do a test, all the positives actually have the disease and all the negatives do not; no people with the disease will be missed.

This also means that you need to know the sensitivity and specificity of the test you are using. Do you know the answer to this for the tests in your clinic? My guess is the answer is no. This varies from test to test. Antigen tests have a lower sensitivity than PCR tests. The sensitivity and specificity also vary by the manufacturer . And just to make it even more complicated, the

predictive value matters too! If the prevalence of the disease is very low (for example, testing for flu when there is very little flu in the community) this also affects your sensitivity and specificity, and the test becomes less accurate.

Phew, that's confusing. I never liked this stuff, but we need to know this. Testing is not black and white. The point is we cannot say that a patient with COVID symptoms and a negative antigen test does not have COVID. The current tests are just not that sensitive. We should not be blanket testing everyone for the "trifecta" because the results do not have meaningful value for everyone. We need to have a thoughtful approach in who we test, and not just "spray and pray" that we get a meaningful answer. These tests are not just positive and negative. They require interpretation. There is a big difference between testing a patient with flu symptoms, exposed to flu, in the middle of flu season and testing a patient with the sniffles who was not exposed in the month of July. The results have very different interpretations. The first probably has the flu. So if the result is positive, it's likely accurate. If the result is positive in the second patient, you really have to consider if the test result is accurate, or if it is a false positive.

So, what do we do? In a perfect world, we understand how our tests work, who should be tested and what the results mean. We test only those that are likely to have the disease, and those in whom it would make a difference if we knew the pathogen that was making them ill. (Think COVID in an elderly patient with COPD, heart disease and renal failure). I hate to add another "thing" to the stewardship bucket, but doing unnecessary, inaccurate testing (the spray and pray) also has consequences. It uses healthcare dollars, subjects people to tests that we may ultimately disregard, may be painful and may result in unnecessary treatment.

Food for thought.

Tracey Davidoff, MD, FCUCM

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Accreditation Statement

The Urgent Care Association (UCA) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

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The Urgent Care Association designates Urgent Caring 2025 Quarter 2 for a maximum of 3 *AMA PRA Category 1 Credit™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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DELAYED MEDICATION REACTION – FIXED DRUG ERUPTION

Cesar Mora Jaramillo, MD, FAAFP, FCUCM

Urgent Care Message

Skin conditions frequently present in Urgent Care settings. Diagnosing medication-related skin reactions can be challenging. In cases of allergic reactions, it is essential for staff and clinicians to first assess the patient's airway and hemodynamic stability. Gathering a detailed history and conducting a thorough medication review are crucial for accurate diagnosis. Failure to obtain a thorough history can result in missed diagnoses, repeat Urgent Care visit or escalation to higher levels of care.

Case Presentation

The patient is a 61-year-old female with a known history of allergic reaction to valproic acid, presenting with a four-day history of cutaneous lesions. She recently initiated meloxicam therapy, which she has since discontinued; however, the skin lesions have persisted without improvement. Notably, she reports a prior episode of similar lesions following exposure to valproic acid. She denies facial edema, dyspnea, cough, wheezing, lip or tongue swelling, fever and upper respiratory symptoms. There are no associated genitourinary or oral mucosal lesions.

Medications: Quetiapine and levothyroxine

Physical Exam

Vital Signs: Blood pressure 134/74 mmHg, heart rate 74 bpm, respiratory rate 13 breaths per minute, temperature 97.6°F, oxygen saturation 99% on room air.

General Appearance: The patient is well-appearing and in no acute distress.

Head and Neck Exam: Facial features are normal. Oral examination reveals no lip or tongue edema and no mucosal lesions.

Pulmonary Exam: Lungs are clear to auscultation bilaterally without wheezes, rales, or rhonchi.

Skin Exam: Lesions are noted on the right medial inner thigh, anterior distal thigh, and left anterior knee. The lesions are circular to oval-shaped, light erythematous plaques with central bullae. They are non-tender, without warmth, fluctuance, or surrounding edema.

Musculoskeletal Exam: The left knee demonstrates full range of motion without pain, swelling, or functional limitation.

Discussion

Skin reactions are frequently manifestations of delayed type drug hypersensitivity. These reactions can present as mild (maculopapular rash and fixed drug reactions) to severe skin reactions (Drug rash with eosinophilia and systemic symptoms (DRESS), Stevens-Johnson syndrome (SJS), toxic epidermal necrolysis (TEN), among others).[1]

Fixed drug eruption (FDE) is a delayed type IV hypersensitivity reaction usually due to oral medications, with antimicrobials and non-steroidal anti-inflammatory medications being the most common triggers. [2]

FDE skin lesions typically resolve when the medication is discontinued but frequently can result in permanent or long-lasting hyperpigmentation of the skin.[3]

The lesions related to FDE are primarily solitary, but new lesions can appear, or current lesions can increase in size when the causing agent is not discontinued. It is common for lesions to recur at the same sites; therefore, a history of previous lesions in a similar location should prompt the consideration of FDE. The lesions have well defined borders and tend to be erythematous, and dusky at their onset. Lesions may occasionally become bullous and can exhibit desquamation or crusting. The most common areas of presentation are perioral area, lips, hands, trunk and genital region.[4,5] FDE lesions are benign but may be associated with pruritus and pain.

Many drugs may induce FDE. The frequency with which individual drugs cause FDE varies over time.

Table 1. Drugs most frequently associated with FDE [5,6]

Antibiotics	Trimethoprim-sulfamethoxazole, tetracyclines, penicillins, quinolones, dapsone
Non-steroidal anti-inflammatory drugs	Acetylsalicylic acid, ibuprofen, naproxen, mefenamic acid, diclofenac, indomethacin
Anticonvulsants	Carbamazepine, lamotrigine
Antimalarials	Quinine
Others	Acetaminophen, barbiturates, metamizole, phenylbutazone, metronidazole, tinidazole, chlormezanone, erythromycin, belladonna, griseofulvin, diflunisal, pyrantel pamoate, clindamycin, allopurinol, orphenadrine, and albendazole.

Other drugs have been associated with FDE but are less common.

Differential diagnoses include Stevens-Johnson syndrome/Toxic epidermal necrolysis, Bullous Pemphigoid, Psoriasis, Erythema Multiforme, Aphthous stomatitis, and autoimmune dermatitis.

Table 2. Differences among Fixed Drug Eruption (FDE), Stevens-Johnson Syndrome (SJS), and Toxic Epidermal Necrolysis (TEN)[7,8,9,10]

Features	Fixed Drug Eruption (FDE)	Stevens-Johnson Syndrome (SJS)	Toxic Epidermal Necrolysis (TEN)
Onset	Typically, within minutes to hours of exposure	1 to 3 weeks after exposure	1 to 3 weeks after exposure
Lesion appearance	Well-defined, round/oval dusky red or violaceous patches; may blister	Erythematous, targetoid, annular, or purpuric macules, flaccid bullae, large painful erosions	Widespread, irregularly shaped erythematous or purpuric macules with blistering that occurs on all or part of the macule. Blisters become more confluent and result in detachment of the

			epidermis and erosions
Distribution	Localized, often recurring at the same site(s)	Widespread, especially on face, trunk, mucosa	Diffuse, >30% of body surface area (BSA)
Mucosal involvement	Rare or mild	Common	Very common and severe (> 2 sites)
Skin detachment BSA	Minimal or none	<10%	>30%
Systemic Symptoms	Minimal	Fever, malaise, arthralgias, upper respiratory symptoms	High fever, severe pain, respiratory distress, multi-organ involvement
Course	Resolves within days after drug cessation; recurs with re-exposure	Acute onset, can progress rapidly	Rapid progression; full-thickness epidermal necrosis
Prognosis	Excellent; post-inflammatory hyperpigmentation common	Moderate mortality (1-5%); complications possible	Poor prognosis; high mortality (25-35%)

Management of FDEs should primarily consist of identifying and discontinuing the offending drug. Topical corticosteroids and systemic antihistamines can provide symptomatic relief, although clinicians may be cautious with the use of levocetirizine and cetirizine as there have been cases of FDEs with the use of these antihistamines.[5]

Resolution of the Case: The patient was diagnosed with a Fixed Drug Eruption (FDE), triggered by recent nonsteroidal anti-inflammatory drugs (NSAID) use. She was advised to avoid NSAIDs in the future and counseled on the potential for similar reactions with other medications. Treatment included loratadine 10 mg daily for symptomatic relief and topical hydrocortisone 2% cream applied to affected areas for 10–14 days. The patient was instructed on signs of recurrence and the importance of seeking medical evaluation before initiating new medications.

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Image Challenge: A Patient with Rash and Facial Droop

Tracey Q. Davidoff, MD, FCUCM

A 32-year-old male who lives in Florida presents to Urgent Care with complaints of a rash on the left side of his neck for 3 days. The rash is described as painful blisters that occurred spontaneously. He wonders if they may be insect bites but does not recall getting bitten. There is a slight burning sensation to the area. He treated himself with hydrocortisone cream and oral diphenhydramine. He is most concerned because on the morning of the visit he awoke with an asymmetry to his face. There is no pain to his face. He does not feel his left eye is closing properly. He denies any eye symptoms, change in vision or hearing, alteration of smell or taste. He has no headache, respiratory or GI symptoms. He has not taken any prescription or over the counter medication except for the diphenhydramine. He has no significant past medical history, including diabetes, cardiovascular disorders or neurologic disorders. He denies any travel within or outside the United States. He is a non-smoker and does not use illicit drugs. He has no history of immunosuppression and denies any significant stressors. His vital signs are normal. Consider the photos above.

What is the most likely diagnosis in this case?

a) *Herpes zoster (HZ)*
b) *Lyme disease*
c) *Trigeminal neuralgia*
d) *Herpes simplex virus (HSV)*
e) *Southern tick-associated rash illness (STARI)*

Answer: a) Herpes zoster (HZ). This patient is experiencing Bell's palsy related to herpes zoster activation.

The association between herpes zoster (HZ) and Bell's palsy has been explored in various studies, indicating a potential link through viral reactivation mechanisms. Bell's palsy, which is an idiopathic peripheral facial nerve palsy, has been associated with the reactivation of latent herpes viruses, including varicella-zoster virus (VZV) and herpes simplex virus (HSV). A study by Furuta et al. demonstrated that VZV reactivation, even without the presence of zoster rash (zoster sine herpete), was detected in a significant proportion of patients with Bell's palsy, particularly in those who were seronegative for HSV.(1) Additionally, Freire de Castro et al. found a 12.76% prevalence of HZ reactivation in patients with idiopathic peripheral facial palsy, suggesting a similar etiological mechanism to that observed in other populations.(2)

Ramsey Hunt syndrome is related to HZ activation with rash affecting the facial nerve distribution which causes Bell's palsy; however, the classic facial droop of Bell's palsy may also occur related to HZ anywhere on the body. (2) This patient's rash is not within the facial nerve distribution.

In Lyme-endemic areas, Lyme disease can account for up to 25% of cases of facial nerve palsy, including Bell's palsy. A study conducted in a Lyme-endemic region in the Netherlands found that 4.7% of patients presenting with facial palsy had positive serology for Lyme borreliosis.(3) Another study in a pediatric population in a Lyme-endemic region reported that 27% of children with acute-onset unilateral peripheral facial palsy had Lyme-related facial palsy.(4) In the patient presented here; however, the rash on the patient's neck is classic for HZ, making this association most likely. The patient also has no history of travel to a high-risk area of Lyme disease.

Although some studies have found a relationship between trigeminal neuralgia and herpes zoster, it does not cause weakness of the facial nerve, as seen in this patient. HZ affecting the trigeminal ganglion results in the characteristic rash in the distribution of the trigeminal nerve with pain which may ultimately result in post-herpetic neuralgia. (5)

Although multiple studies have documented an association between active herpes simplex outbreaks and Bell's palsy, (6,7) the appearance and location of this patient's rash is much more likely to be due to HZ.

STARI is a self-limited syndrome related to a tick bite in an area not known to be endemic for Lyme disease. Originally diagnosed in the southern part of the United States, it can be found in multiple regions. It is felt to be caused by the organism *Borellia lonestari*. There are no known extracutaneous manifestations, and It is not associated with any known neurologic complications including Bell's palsy. (8)

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Measles Response in the Urgent Care Setting

Erin Loo, PA-C and Chris Chao, MD

Urgent Message: Measles cases are on the rise in the United States. Urgent Care centers need to have a plan to recognize and isolate potential cases for the safety of staff and other patients.

Background

There were over 1,000 confirmed cases of measles in the United States as of May 13, 2025. (1). That number is estimated by public health officials to be much higher, as some patient populations are not getting tested (2). The increase in cases has been attributed to increased vaccine hesitancy and outbreaks in populations with low levels of vaccination (1). Internationally, measles cases are also on the rise leading to more imported cases from travel (2). Measles vaccination efforts started in 1963, with measles cases dropping dramatically within the 5 years following (3). Measles was declared eliminated in the U.S in the year 2000 because of no ongoing transmission over a 12-month period; however, that designation is now at risk with increased outbreaks and transmission (1).

Vaccination has been so successful at preventing measles, that most clinicians have never seen a case of measles outside of a textbook. Taking a good history including vaccination history, recent travel and exposure to measles is vitally important to make the diagnosis, followed by a thorough physical exam. Symptoms include fever, up to 105 F, the three Cs, “cough, coryza, conjunctivitis”, followed by a rash that begins in the hairline and spreads downward (3). While most early symptoms of measles fall into a generic category of viral prodrome, recognizing the pathognomonic exam finding of Koplik spots, white/grey spots on the buccal mucosa near the second molars, can prevent further community spread if identified in susceptible patients (4). These lesions typically appear 48 hours before the measles rash and last 12-72 hours (4). The presence of Koplik spots is not required to make the diagnosis of measles as not every patient will have this finding on physical, and the lesions can be transient. The incubation period of measles is 7-21 days (3). Patients are considered contagious for 4 days before the onset of the rash until 4 days after onset of the rash (3). Remember that 5% of recently vaccinated patients will have a mild transient febrile rash illness up to 21 days following vaccination (3). It is important to not confuse this rash, that is the sequelae of the MMR vaccine, with an active measles infection.

Measles is one of the most contagious viral illnesses known to man. In susceptible populations, 90% will become infected following exposure (2). Because of this, early recognition of potential measles cases presenting to the Urgent Care center should be quickly identified and isolated for the safety of the clinic staff and other patients in the facility.

Considerations in Urgent Care Setting

Screening for patients that are at high risk for measles should become part of your clinic workflow. Signs should be posted outside for patients to identify themselves if their visit is for rash with fever

or concern for measles (5). Likewise, if a patient calls the clinic with symptoms, a plan should be made ahead of time for the patient to enter through a back door, avoiding the general patient population altogether (5). All Health Care Personnel (HCP) should be trained to recognize these complaints and notify the clinician on duty for immediate triage. These patients should not be in the waiting room with other patients.

Urgent Care centers should be in close contact with local and state health departments now to develop protocols for potential measles cases. State and local health departments have varying policies regarding testing and notification, so contact should be made before a potential measles case presents to your facility. In addition, your referral laboratory should be contacted for turnaround times for processing measles PCR, IgG and IgM testing. Preferred swabs and transport medium should also be established so that errors are not made with samples sent for testing. Measles is immediately reportable, so any case with a high index of suspicion should be reported to the local health department so that isolation and contact tracing can begin. Any confirmed case must also be reported (5).

Patients in the clinic should be immediately masked if over the age of 2 along with all close contacts and taken to an isolation room if available (5). If no isolation room is available, the door should remain shut while the patient is in the building and limit unnecessary personnel from entering the room. Any HCP involved in care should have immunity to measles. Regardless of immunity, any HCP in the room should use a fit tested N95 respirator or equivalent (5). Because measles can remain airborne for up to 2 hours, once the suspected case has left the facility, the room should not be used for 2 hours to allow for sufficient airborne contaminant removal (5). Standard cleaning procedures of all surfaces using an EPA registered disinfectant for healthcare settings and disposal of PPE in medical waste is sufficient before use of room (5).

HCP presumptive immunity

Per the CDC guidelines, any HCP caring for patients with a high index of suspicion of measles or diagnosed measles should have immunity. CDC criteria for immunity as follows should be established for HCP with potential for exposure to measles cases (5).

Personnel born before 1957 or, laboratory confirmed infection or, written documentation of 2 doses of measles vaccine spaced 28 days apart, starting at 12 months of age or older or , laboratory confirmed immunity with positive IgG (equivocal results are considered negative for purposed of presumptive immunity).

If HCP do not meet the above criteria, they should not be considered immune and should not participate in care of suspected or confirmed measles patients. CDC does not recommend routine titers as proof of immunity (5).

Post Exposure Protocol for HCP in Urgent Care

Exposure is defined as sharing air space with an infected patient or sharing air space that housed an infected patient within the previous 2 hours (5).

Any HCP with no immunity to measles and exposure to patients with confirmed measles should be excluded from work from day 5-21 after their exposure (5). Post exposure vaccination should be administered within 72 hours, or if high risk, measles IgG can be administered (5). Work exclusions still apply, even if Post Exposure Prophylaxis (PEP) is administered. Non-immune HCP are at high risk for contracting measles and are more likely to experience complications from infection (4).

Exposed HCP personnel with immunity who are asymptomatic do not need to be excluded from work and no PEP prophylaxis is necessary (5).

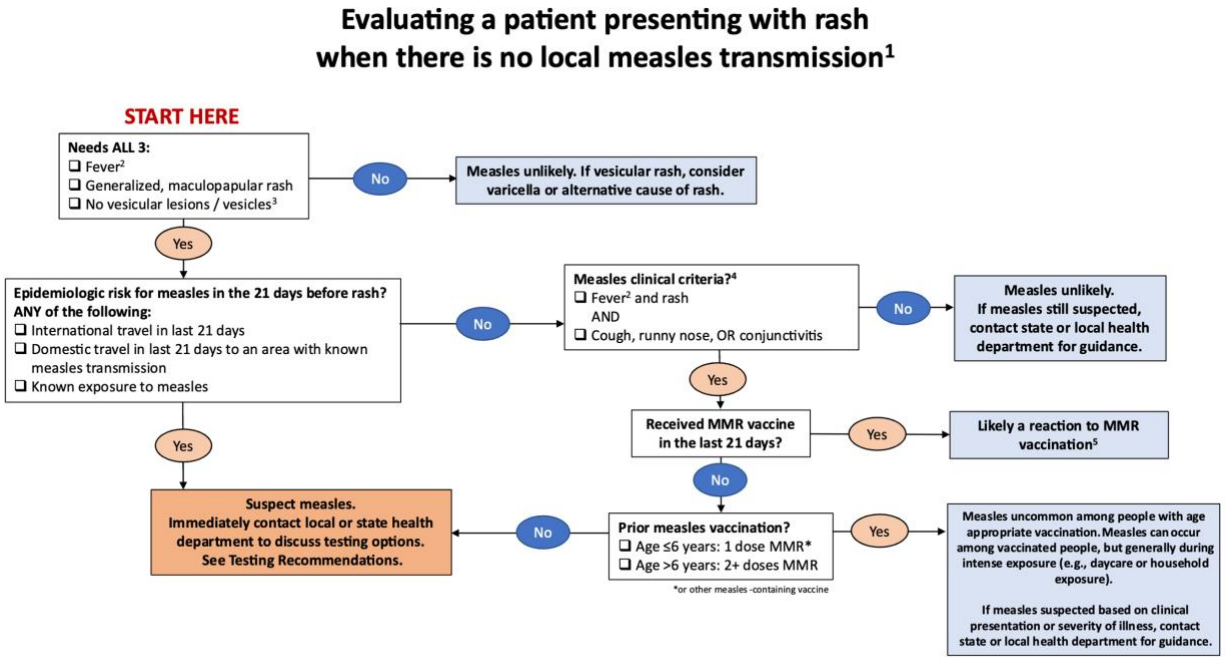
Urgent Care Specific Recommendations

- *Keep Measles in the differential diagnosis of febrile rash illness even if there is no current outbreak in your community (2).*
- *Your facility should develop a facility specific door-to-door workflow on how to handle a suspected measles patient. Workflow should be distributed to all staff and clinicians.*
- *Be prepared to rapidly identify and isolate potential measles patients (5).*
- *Consider adding rash with fever to your intake paperwork and training your front desk staff to include this complaint in list of symptoms to immediately notify clinician on duty.*
- *Have necessary masks and PPE available for staff. Any HCP in the room with a patient should have fit tested N95 or equivalent regardless of immunity status (5).*
- *Identify contacts in your area including the local health department and epidemiologist's after hours numbers. Post them in a visible location. Contact your local health department now to develop protocols.*
- *Contact the local Health Department/epidemiologist on call to discuss any patient that the clinician has a high index of suspicion of measles, even if it is after hours. Have pertinent history available including the history of present illness, onset of fever, onset of rash and its spread, recent exposures, recent travel history, and vaccination status. If possible, do this while the patient is still in the facility.*
- *Designate a champion in your facility to be a point of contact if a suspected measles patient arrives at your facility.*
- *Ensure clinicians and staff have presumed immunity to measles. If unsure, offer serologic testing or advise MMR booster (5).*
- *Adhere to Standard and Airborne Precautions for patients with known or suspected measles (5). This would include HCP using N95 respirators, gloves, gowns, and eye protection while in the room with the patient. Patients with suspected measles should be*

masked if over the age of two, in a room with the door closed and limiting movement of the patient outside of the exam room.

- *Be prepared to appropriately manage or refer to exposed HCP for PEP treatment.*
- *Routinely promote respiratory hygiene and best practices in the facility with signs and visible reminders for patients and staff.*
- *Report all confirmed cases of measles to the Health Department.*

The following outbreak response algorithm and notes are part of the measles toolkit for clinicians provided by the CDC (6).



*CSTE: Council of State and Territorial Epidemiologists: https://ndc.services.cdc.gov/case-definitions/measles-2013/

1. *This testing algorithm is intended to be used by bedside clinicians in settings where there is no local measles transmission. This assumes that the pre-test probability for most people without known epidemiologic risk for measles and who do not meet case criteria will be low. In settings with active measles transmission, the threshold at which to pursue testing may be lower, and a more permissive algorithm could be considered.*
2. *Either a measured or patient/family-reported fever is adequate; fever may not be measured at the time of healthcare evaluation due to normal fluctuation or to use of antipyretics (e.g., ibuprofen).*

3. *A vesicular rash is not consistent with measles, and should prompt consideration for other causes of rash (e.g., varicella/chickenpox)*
4. *Measles clinical criteria (per CSTE* case definition) include ALL of the following:*
    - *Generalized maculopapular rash*
    - *Fever*
    - *Cough, coryza (runny nose), or conjunctivitis (also known as the "3 C's")*
5. *Up to 5% of MMR recipients will get a short-lived, mild febrile rash. This is more common with the first dose of MMR. People who experience this vaccine reaction are not contagious to others around them. If a person has received MMR within 21 days before rash onset, but also has epidemiologic risk for measles, then specialized testing may be required and should be discussed with local or state public health authorities*

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Benchmarking Urgent Care Clinicians' Confidence Level in Common Procedures: A Quantitative Survey Study

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On behalf of the College of Urgent Care Medicine (CUCM)

Urgent Message: Procedures are commonly performed in Urgent Care centers. Urgent Care clinicians have high confidence in performing many of these procedures.

ABSTRACT

Introduction : Urgent Care medicine is rapidly expanding as Urgent Care center locations continue to grow. At the same time, decreased complexity of care, and subsequently, lower reimbursement is occurring. The underlying reasons for this are unknown; however, we aimed to identify the current state of clinician confidence in procedures as that may be a contributing factor. Therefore, we aimed to identify the current state of Urgent Care clinicians' confidence in common procedures and the factors that impact this confidence.

Methods: This is a quantitative survey study. It was administered via a voluntary online survey to Urgent Care clinician members of the College of Urgent Care Medicine. Categorical variables were summarized using frequencies and percentages. Multivariable logistic regression analysis identified differences between groups.

Results: Survey response rate was 7.9%. Nine of 24 procedures had high confidence for most Urgent Care clinicians. Confidence increased with years of Urgent Care experience. The most common cause of lower confidence cited was lack of training/knowledge.

Discussion: This study identified several common Urgent Care procedures in which clinicians are highly confident, creating a current state benchmark.

INTRODUCTION

Over the past 15 years, there have been significant changes in Urgent Care (UC) medicine. First and foremost, this is a rapidly expanding field of medicine as Urgent Care centers now provide more than 200 million visits a year performed in over 14,000 locations. Additionally, Urgent Care centers have transitioned from 54% physician owners to only 27% physician owners over the same time period[1]. Over this period of growth, the Urgent Care clinician workforce has shifted to 85% nurse practitioners and physician assistants and 15% physicians; billing codes demonstrate decreased complexity of care and lower reimbursement. Procedurally, fewer radiographs are ordered and fewer lacerations are repaired[2].

Further published data does not exist to examine other procedural or medical complexity aspects of care in the Urgent Care setting. The underlying reasons for these changes are likely multifactorial but have never been specifically investigated. Training programs for physicians who may ultimately practice in the Urgent Care setting frequently include and evaluate procedures and procedural confidence[3]. Procedures performed by advanced practice clinicians in other settings including emergency departments and intensive care units have been examined[4] and demonstrated that procedural confidence grows with experience and leads to greater independence[5].

The College of Urgent Care Medicine (CUCM) serves as the professional organization for all designations of Urgent Care clinicians. CUCM, in collaboration with the Urgent Care College of Physicians, represents and serves the Urgent Care clinician community through activities focused on advancing the specialty and inspiring excellence through clinical research, clinical education, clinical practice guidelines and clinician integration into healthcare systems[6]. CUCM has identified specific procedural competencies that are expected of practicing Urgent Care clinicians including initial x-ray interpretation, electrocardiogram interpretation, eye procedures including foreign body removal and corneal foreign body removal, incision and drainage, various types of laceration repair and fracture care[7]. At the time of the survey membership consisted of just under 3,000 physician, physician assistant and nurse practitioner members.

This project aimed to identify the current state of Urgent Care clinicians' confidence in common Urgent Care procedures designated by the College of Urgent Care Medicine as essential skills, and the factors that impact this confidence. The intention is that this will become the benchmark survey of procedural confidence of current practicing Urgent Care clinicians.

METHODS

This is a quantitative survey investigation. A survey tool was designed focused on Urgent Care clinicians' confidence in common Urgent Care procedures based on the CUCM procedural competencies list. The study was determined to be exempt by Solutions IRB, protocol number #2023/06/27. The survey was administered via a Qualtrics online survey from September 22, 2023 through December 19, 2023. Confidence in specific skills was queried using the Likert Scale (0-10), with 10 being extremely confident. If a respondent identified their level of confidence as a seven or less, the survey was triggered to ask the most relevant reason as to their level of confidence which included both individual clinician factors and organizational factors (e.g., lack of knowledge or training, lack of resources such as support staff, perceived risk/liability, lack of time to perform the procedure, reimbursement concerns, service not offered at the clinic, procedure is outside the scope of services of the clinic or other). This voluntary anonymous survey was administered via electronic delivery to all College of Urgent Care Medicine's clinicians. Gift card incentives (via a random drawing) were provided to encourage participation (the protocol ensured the survey respondents and their responses remained de-identified).

The survey data were imported into a statistical software package for analysis. All statistical analyses were performed using R (version 4.3.2, R Foundation for Statistical Computing, Vienna, Austria). The p-value threshold for statistical significance is <0.05. Continuous variables were

inspected using histogram and quantile-quantile plots to ensure that statistical assumptions were met. Categorical variables were inspected using frequencies and cross-tabulations with other categorical variables. Descriptive statistics were reported for each survey item. Categorical variables are summarized using frequencies and percentages. A binary variable was created for each Likert-scale response such that 0-7 will be coded as inadequate (No=0) and 8-10 as adequate (Yes=1). This binary variable is used as an outcome in a multivariable logistic regression, where the predictors are respondent demographic characteristics.

RESULTS

The survey request was sent to 2,922 College of Urgent Care Medicine clinicians (156 (5%) Doctors of Osteopathic Medicine (DO), 922 (32%) Doctors of Medicine (MD), 839 (29%) Nurse Practitioners (NP) and 1,005 (34%) Physician Assistants (PA)). The overall response rate was 7.9% (230/2,922), with 119 (51.7%) MD/DOs, 45 (19.6%) NPs, and 66 (28.7%) PAs. For the clinical demographics of the survey participants refer to Table 1. The survey asked about confidence in 24 common Urgent Care procedures. Over 80% of all Urgent Care clinicians felt confident in the following 13 procedures: laboratory test interpretation, pelvic examination including vaginal foreign body removal, removal of foreign body ear and nose, fracture splinting or durable medical equipment placement, subungual hematoma trephination, incision and drainage (abscess, hematoma, paronychia), ingrown nail excision, superficial laceration repair, facial lacerations, subcutaneous sutures, digital blocks, nursemaid's elbow reduction, and non-displaced and/or minimally displaced fractures initial evaluation and care (Figure 1).

In evaluation by training degree (MD/DO, NP, and PA), procedures where participants demonstrated high confidence were the following nine procedures: laboratory test interpretation, pelvic examination including removal of vaginal foreign body, removal of foreign body ear and nose, fracture splinting or application of durable medical equipment, subungual hematoma trephination, incision and drainage (abscess, hematoma, paronychia), superficial laceration repair, digital blocks, and initial evaluation and care of non-displaced and/or minimally displaced fractures (Table 2).

In comparing participant responses by training degree (MD/DO, NP and PA) there were some significant differences. Nurse Practitioners had increased odds of being less confident than MD/DOs in initial X-ray interpretation, EKG interpretation, removal of corneal foreign body, removal of foreign body eye, anterior nasal packing, ingrown nail excision, facial lacerations, subcutaneous sutures, digital blocks, nursemaid's elbow reduction and phalangeal dislocation reduction. Nurse Practitioners had increased odds of being more confident than MD/DOs in placement of an IV, management of an IV and complication/awareness of IVs. Physician Associates had increased odds of being less confident than MDs/DOs in in initial X-ray interpretation, EKG interpretation and ingrown nail excision (Table 2).

Odds of high confidence in all procedures without broad high confidence in all training degrees increased with years of experience in Urgent Care medicine with the following exceptions: placement of an IV, management of an IV, complication/awareness of an IV, and follow-up of non-

displaced and/or minimally displaced fractures. Additionally, the odds of high confidence increased with years of experience for pelvic examination including removal of vaginal foreign body, subungual hematoma trephination, and digital blocks despite having very high confidence (Table 3).

The most common reasons for low confidence in all procedures were lack of training/knowledge and that the procedure is not offered in their Urgent Care center. There were several other factors that also contributed to low confidence in procedures (Table 4).

DISCUSSION

Among the 230 Urgent Care clinicians who participated in this survey we found high confidence in several common procedures with the greatest confidence in laboratory test interpretation, incision and drainage and superficial laceration repair. Additionally, we identified several common procedures where confidence is lower including placement of an IV, Morgans Lens irrigation and removal of corneal foreign body. A significant contributing factor to these varying levels of confidence was training degree (MD/DO, NP, PA). This may reflect differences in the prerequisites for entering differing degree programs and the components of the degree programs themselves. For example, NPs are highly confident in IV related procedures, likely due to their years of experience as nurses prior to entering NP programs which differs from both MD/DO and PA training programs. It is critical that Urgent Care leaders understand that there is significant variability in procedural confidence based on professional degree and the procedure. Understanding common procedures where increased confidence is necessary would be beneficial in the creation of onboarding and training programs for Urgent Care clinicians when they begin their work in Urgent Care.

Years of practice in Urgent Care medicine improves confidence in most Urgent Care procedures which indicates that experience in the field also increases confidence. While confidence does not confer competence, there may be benefits to having experienced Urgent Care clinicians practicing in the Urgent Care center to help train and assist newer Urgent Care clinicians. This may be challenging as the number of Urgent Care centers rapidly expands, and more clinicians are needed. Of note, our participants had on average over 10 years of clinical and Urgent Care experience which indicates the need for proactive evaluation of procedural skills and continued opportunities for growth in this field even after many years of experience.

While the greatest reason for not having confidence in procedures was lack of training, we identified that many of the procedures are not offered at the center and/or are out of scope of care established by the organization or medical leadership. Further research is needed to understand the reasons behind why these services are not offered at the clinic. Additionally, due to the fast-paced and busy clinical environment, many participants indicated that time and other clinical resources were limitations to performing these procedures. Overall, lack of procedural confidence may be contributing to the decreasing complexity and scope of Urgent Care medicine.

There were several limitations in our study. First, this study only surveyed Urgent Care clinicians who were current members of the College of Urgent Care Medicine and may not represent all practicing Urgent Care clinicians. Second, there was a low overall response rate so the results of these participants may not represent the entire membership of the College of Urgent Care Medicine. Third, there was a significantly higher response rate for MD/DOs compared to NP/PAs and in the CUCM as well as practicing Urgent Care clinicians, there are significantly more NP/PAs, when combined, compared to physicians. Fourth, this was a voluntary survey and therefore, it may include an unknown selection bias. Fifth, procedures were not specifically defined in the survey and thus participants may have had varied interpretation of what was being referenced. Lastly, this was a study solely asking about confidence and the relationship between confidence and procedural ability is not known; therefore, we recognize that this study does not represent procedural competency which is important in the care of patients.

In conclusion, this study identified several common Urgent Care procedures in which clinicians are highly confident as well as those procedures where the clinicians identified as having lower confidence. This information can help direct the focus for future educational programs for Urgent Care clinicians as well as future research into procedures performed in Urgent Care centers.

ACKNOWLEDGEMENTS

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TABLES AND FIGURES

Table 1. Clinical characteristics of survey participants. *This question allowed for multiple responses; thus the total exceeds the sample size of 230.

	Total (N = 230)
Degree	
MD/DO	119 (51.7%)
NP	45 (19.6%)
PA	66 (28.7%)
Years of Clinical Experience, All, mean (SD)	18.13 (11.03)
No response, N (%)	35 (15%)
Years of Clinical Experience, MD/DO, mean (SD)	24.04 (9.82)
No response, N (%)	15 (12.6%)
Years of Clinical Experience, NP, mean (SD)	10.93 (8.05)
No response, N (%)	5 (11.1%)
Years of clinical Experience, PA, mean (SD)	12.68 (8.98)
No response, N (%)	6 (9.1%)
Years of Urgent Care experience, all, mean (SD)	10.31 (7.50)
No response, N (%)	29 (12.4%)
Years of Urgent Care Experience, MD/DO, mean (SD)	13.58 (8.07)
No response, N (%)	13 (10.9%)
Years of Urgent Care Experience, NP, mean (SD)	5.62 (3.79)
No response, N (%)	5 (11.1%)
Years of Urgent Care Experience, PA, mean (SD)	7.95 (5.17)
No response, N (%)	11 (16.7%)

Primary Specialty	
Internal Medicine (Adult)	5 (2.2%)
Pediatric	15 (6.5%)
Emergency Medicine	59 (25.7%)
Family Medicine	89 (38.7%)
None	22 (9.6%)
Other	5 (2.2%)
Urgent Care	31 (13.5%)
Occupational Medicine	3 (1.3%)
Surgery	1 (0.4%)
Multiple Choice: Additional Clinic Designation[1]	
Pediatric	215 (51.4%)
Occupational Medicine	134 (32.1%)
Women's Health Clinic	58 (13.9%)
Other	8 (1.91%)

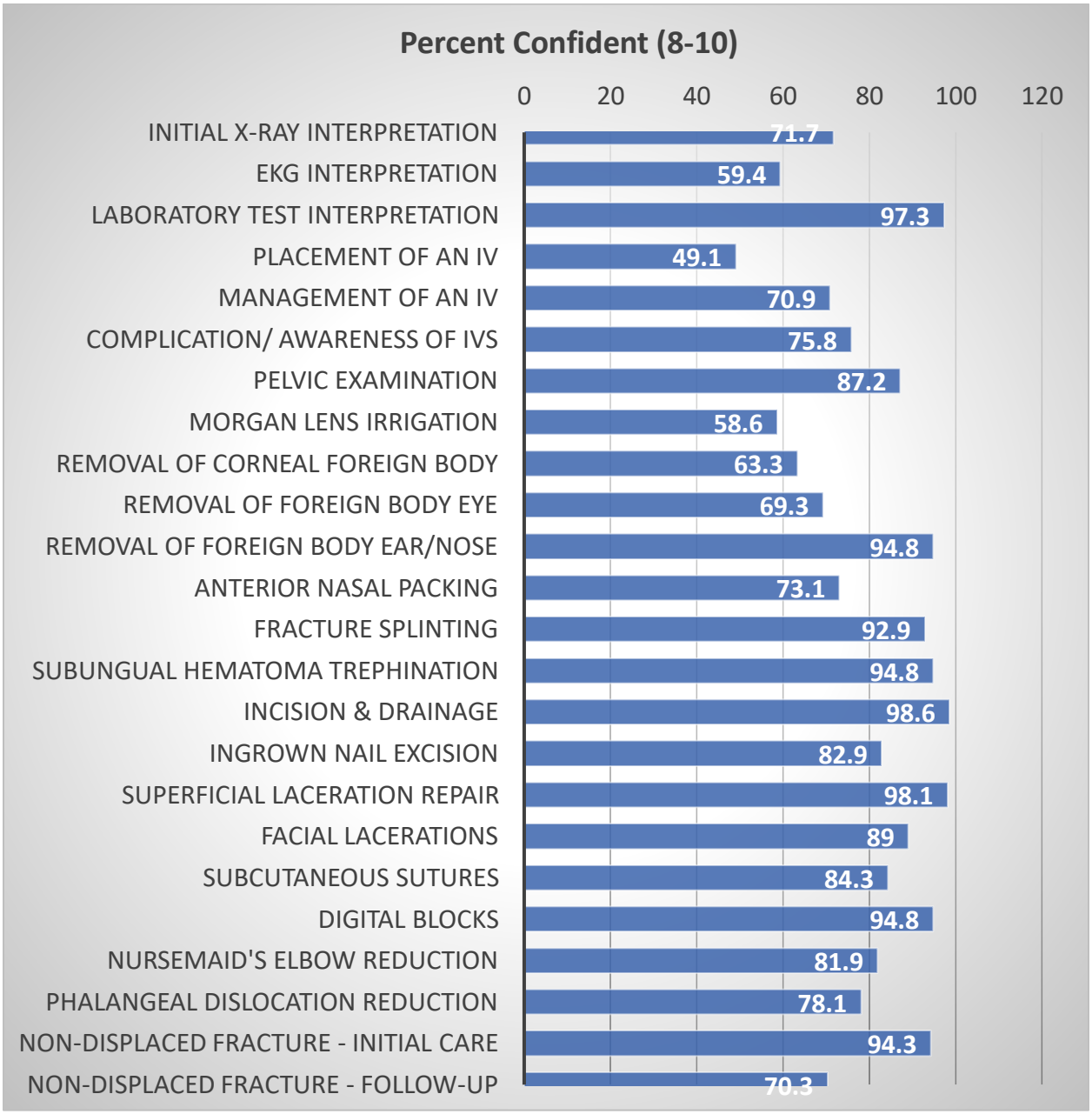

Figure 1. Survey participant responses (confident or not confident) in the 24 Urgent Care procedures.

Table 2. Survey participant high confident responses in the 24 Urgent Care procedures by training degree including odds ratios comparing NP to MD/DO and PA to MD/DO as well as *p-value* among all three training degree groups. MD – Medical Doctor, DO – Doctor of Osteopathic Medicine, NP – Nurse Practitioner, PA – Physician's Associate, OR – Odds Ratio, CI – Confidence Interval

	MD/DO (N = 119)	NP (N = 45)	OR	(95% CI)	PA (N = 66)	OR	(95% CI)	*p-value*
Initial X-ray interpretation	104 (88.9%)	15 (34.9%)	0.08	(0.03,0.19)	43 (65.2%)	0.34	(0.14,0.78)	*<0.001*
EKG interpretation	83 (72.2%)	22 (51.2%)	0.41	(0.19,0.86)	28 (42.4%)	0.29	(0.14,0.59)	*<0.001*
Laboratory test interpretation	113 (100.0%)	41 (95.3%)	1.02	(0.17,6.14)	60 (93.8%)	N/A	N/A	*0.013*
Placement of an IV	46 (40.7%)	36 (83.7%)	8.39	(3.32,21.19)	26 (40.6%)	1.17	(0.58,2.36)	*<0.001*
Management of an IV	82 (72.6%)	40 (93.0%)	6.27	(1.75,22.48)	34 (53.1%)	0.58	(0.28,1.19)	*<0.001*
Complication/ awareness of IVs	89 (78.8%)	39 (90.7%)	3.65	(1.13,11.76)	38 (60.3%)	0.64	(0.30,1.40)	*0.001*
Pelvic examination, including foreign body removal (vaginal)	98 (87.5%)	36 (83.7%)	0.65	(0.23,1.83)	56 (88.9%)	0.95	(0.33,2.77)	*0.742*
Morgan lens irrigation	73 (67.0%)	22 (51.2%)	0.69	(0.32,1.47)	31 (49.2%)	0.77	(0.37,1.57)	*0.039*
Removal of corneal foreign body	82 (75.2%)	13 (30.2%)	0.15	(0.06,0.33)	41 (65.1%)	0.63	(0.30,1.35)	*<0.001*
Removal of foreign body eye	86 (78.9%)	16 (37.2%)	0.14	(0.06,0.32)	47 (74.6%)	0.67	(0.30,1.51)	*<0.001*
Removal of foreign body ear and nose	102 (95.3%)	39 (90.7%)	0.6	(0.14,2.56)	60 (96.8%)	2.17	(0.35,13.65)	*0.386*

Anterior nasal packing	90 (84.1%)	24 (55.8%)	0.31	(0.13,0.70)	41 (66.1%)	0.58	(0.25,1.33)	*0.001*
Fracture splinting or durable medical equipment placement	99 (92.5%)	38 (88.4%)	0.57	(0.17,1.98)	60 (96.8%)	2.18	(0.40,11.86)	*0.235*
Subungual hematoma trephination	104 (97.2%)	38 (88.4%)	0.33	(0.07,1.59)	58 (95.1%)	1.15	(0.19,7.03)	*0.102*
Incision & drainage (abscess, hematoma, paronychia)	106 (100.0%)	40 (93.0%)	N/A	N/A	61 (100.0%)	N/A	N/A	*0.008*
Ingrown nail excision	98 (92.5%)	30 (69.8%)	0.2	(0.07,0.55)	46 (75.4%)	0.28	(0.10,0.77)	*0.001*
Superficial laceration repair	105 (99.1%)	40 (93.0%)	0.27	(0.02,3.05)	61 (100.0%)	N/A	N/A	*0.034*
Facial Lacerations	99 (93.4%)	28 (65.1%)	0.14	(0.05,0.39)	60 (98.4%)	4.51	(0.50,40.48)	*<0.001*
Subcutaneous sutures	97 (91.5%)	25 (58.1%)	0.15	(0.06,0.38)	55 (90.2%)	1.07	(0.32,3.51)	*<0.001*
Digital blocks	104 (98.1%)	36 (83.7%)	0.11	(0.02,0.61)	59 (96.7%)	0.73	(0.09,6.08)	*0.003*
Nursemaid's elbow reduction	93 (87.7%)	26 (60.5%)	0.27	(0.11,0.66)	53 (86.9%)	1.48	(0.51,4.26)	*0.001*
Phalangeal dislocation reduction	93 (87.7%)	22 (51.2%)	0.16	(0.07,0.38)	49 (80.3%)	0.68	(0.26,1.76)	*<0.001*
Non-displaced and/or minimally displaced fractures, initial evaluation, care	102 (96.2%)	39 (90.7%)	0.57	(0.13,2.59)	57 (93.4%)	1.08	(0.22,5.40)	*0.35*
Non-displaced and/or minimally displaced fractures, follow-up	71 (67.0%)	31 (73.8%)	1.51	(0.66,3.47)	45 (73.8%)	1.6	(0.73,3.53)	*0.581*

Table 3. Odds ratios for increasing confidence with each additional year of work in Urgent Care. OR – Odds Ratio, CI – Confidence Interval

	OR	95% CI	*p-value*
Initial X-ray interpretation	1.20	(1.12,1.30)	0.001
EKG interpretation	1.10	(1.05,1.16)	0.001
Laboratory test interpretation	1.38	(0.97,1.97)	0.071
Placement of an IV	1.00	(0.96,1.04)	0.960
Management of an IV	1.03	(0.98,1.08)	0.206
Complication/ awareness of IVs	1.03	(0.98,1.09)	0.215
Pelvic examination, including foreign body removal (vaginal)	1.10	(1.01,1.21)	0.027
Morgan lens irrigation	1.06	(1.02,1.11)	0.008
Removal of corneal foreign body	1.11	(1.05,1.18)	0.001
Removal of foreign body eye	1.10	(1.03,1.16)	0.002
Removal of foreign body ear and nose	1.07	(0.95,1.21)	0.239
Anterior nasal packing	1.08	(1.02,1.14)	0.008
Fracture splinting or durable medical equipment placement	1.04	(0.95,1.14)	0.364
Subungual hematoma trephination	1.69	(1.21,2.34)	0.002
Incision & drainage (abscess, hematoma, paronychia)	1.56	(0.93,2.64)	0.094
Ingrown nail excision	1.12	(1.03,1.21)	0.006
Superficial laceration repair	1.51	(0.97,2.36)	0.070
Facial Lacerations	1.12	(1.02,1.23)	0.020
Subcutaneous sutures	1.23	(1.10,1.37)	<0.001
Digital blocks	1.34	(1.09,1.64)	0.006
Nursemaid's elbow reduction	1.14	(1.05,1.24)	0.002
Phalangeal dislocation reduction	1.08	(1.01,1.16)	0.017
Non-displaced and/or minimally displaced fractures, initial evaluation, care	1.19	(0.99,1.43)	0.072
Non-displaced and/or minimally displace fractures, follow-up	1.01	(0.97,1.06)	0.588

Table 4: Frequency of reasons for low procedural confidence. n – number, % - percent

Reasons for Low Confidence	n	%
Lack of training/knowledge	482	31.6
We do not offer this at my center	285	18.7
Other*	189	12.4
Perceived liability/ risk	154	10.1
This competency is outside my organization's defined scope of services, so I refer the patient elsewhere	137	9.0
Lack of resources, ancillary services to support me (e.g., supplies, diagnostics such as lab/ radiology)	129	8.5
Insufficient time to perform	122	8.0
Reimbursement limitations (e.g., the cost to provide the service exceeds remuneration)	22	1.4
Excluded from professional liability coverage	4	0.3
	1524	100.0

The DOT Exam Column—Determination Pending

Rick Nunez, MD

As DOT medical examiners know, *"determination pending"* is used when the examiner evaluates a driver and needs more information to make a qualification decision. Using this category provides the examiner with up to 45 days to collect the information needed to make a qualification decision. In such cases, the examiner needs the additional information to determine if the driver can safely be put behind the wheel of a Commercial Motor Vehicle (CMV). In such cases, then it is imperative to consider if the driver has time left on the current Medical Examiners Certificate (MEC). If the examiner chooses to use the Determination pending category and the driver has time left on his/her current MEC, the driver may continue driving until the driver's MEC expires. Therefore, in such a case where the examiner needs more information, yet it is not clear if the driver poses a threat to public safety and more information is needed, the driver should be disqualified – Determination Pending should not be used. The use of determination pending does not extend the expiration date of an individual's current Medical Examiner's Certificate. If the examiner determines that the driver is safe to operate a CMV based on the initial examination, but more information is needed to determine the appropriate certification length and the driver's MEC will expire shortly after the initial examination, the ME may issue a short-term MEC, rather than using the determination pending category.

One question that arises occasionally: Is an examiner able to put a driver into a determination pending status consecutively? According to the Federal Motor Carrier Safety Administration (FMCSA), regulations do not prohibit the examiner from using determination pending more than once. However, if the disposition of determination pending is not updated with a qualification decision via the National Registry on or before the 45-day initial pending determination expiration date, the initial examination is no longer valid, and the driver is required to get a new medical examination. Therefore, a driver can be placed into a second pending determination status as the result of a new DOT examination.

There is only one situation in which FMCSA permits another medical examiner to finish the DOT exam and make a physical qualification determination after an individual is placed in determination pending. That situation is when the second examiner works within the same practice as the initial examiner.

At the follow up visit, the medical examiner checks "Medical Examination Report (MER) amended" and signs and dates the form. The examiner who makes the physical qualification determination is required to submit a new CMV Driver Medical Examination through the examiner's National Registry account to record the results of the examination.

The MER is **not** signed at the initial visit when the driver is placed in determination pending.

The certification interval of the MEC is based on the date when the certification decision is made, i.e., the follow-up visit, not the initial visit when the driver is placed into determination pending status.

If the driver does not return on or before the 45-day expiration date and the disposition of determination pending is not updated via the National Registry on or before the 45-day expiration date, the examination is no longer valid. The examiner does not need to submit another CMV Driver Medical Examination Result into the National Registry system but should denote the MER as "Incomplete Exam."

If you have any questions regarding the DOT exam or obtaining NRCME certification, feel free to email: mail@EMedHome.com.

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Best Practice Summary from the Urgent Care College of Physicians

Acute Paronychia: Diagnosis and Management

Date Reviewed	01/17/25
Subject	Acute paronychia Diagnosis and Management
Patient Population	Children and Adults
Rationale	Paronychia is one of the most common conditions diagnosed in Urgent Care settings. Management can range from conservative care to procedural treatment if an abscess is present. It is essential for Urgent Care clinicians to accurately diagnose and effectively treat Acute paronychia to prevent poor outcomes.
Introduction	Acute paronychia, which lasts less than six weeks, is one of the most common hand infections in the United States. This infection affects one or more of the three nail folds (proximal or lateral) after the protective barrier has been compromised. It is rarely seen in toenails. Acute paronychia can occur spontaneously or as a result of trauma or manipulation, and it is three times more common in women.[1] Typically, it affects one finger, although multiple nails may be involved in cases of drug-induced paronychia.
Evidence-based Guidelines with Strength of Evidence	Diagnosis of Acute paronychia is purely clinical. Imaging modalities are rarely needed. Ultrasound can be utilized to identify the presence of an abscess or cellulitis when it is not clinically apparent (evidence rating C). The management depends on the level of inflammation and whether an abscess is present. The addition of topical steroids to topical antibiotics decreases the time to symptom resolution (evidence rating B). If an abscess is present, drainage is required. After successful drainage of an uncomplicated abscess, oral antibiotics are generally not required with adequate medical follow-up (evidence rating C). Prospective studies have shown that adding systemic antibiotics does not improve cure rates following incision and drainage of cutaneous abscesses. [1]

	Currently, there are no high-quality studies comparing the effectiveness of oral versus topical antibiotics for uncomplicated paronychia or evaluating the use of oral antibiotics alongside surgical incision and drainage for Acute paronychia with the presence of an abscess.[2] Choosing Wisely® suggests avoiding antibiotics and wound cultures in patients with uncomplicated skin and soft tissue abscesses after successful incision and drainage and adequate medical follow-up.
Discussion	Acute paronychia is commonly caused by a bacterial infection, primarily from organisms such as Staphylococcus aureus and Streptococcus pyogenes. In contrast, chronic paronychia often involves different pathogens. [1,2,3] Less common causative agents may include gram-negative organisms, dermatophytes, herpes simplex virus, and yeast. Several factors can predispose individuals to paronychia, including structural abnormalities, inflammatory diseases like psoriasis, contact irritants, excessive moisture and reactions to medications. Occupation and working environment information might be critical not only for diagnosing Acute paronychia but also for prevention recommendations. Imaging is rarely necessary but may be helpful if a deeper infection or abscess is suspected. For instance, fluid collection in the area indicates an abscess, while a subcutaneous cobblestone appearance may suggest cellulitis. Ultrasonography can also be performed if the clinician has difficulty draining an abscess. Management of Acute paronychia depends on the level of inflammation and whether an abscess is present. If only mild inflammation is noted without overt cellulitis, treatment typically includes warm soaks and antibiotics.[1,3] Warm soaks, using water or antiseptic solutions like chlorhexidine or povidone-iodine, should last for 10 to 15 minutes and be done multiple times a day. While evidence does not strongly favor topical versus oral antibiotics, the choice may depend on the physician's experience and the severity of the condition. Topical antibiotics are generally used for mild inflammation, while oral antibiotics are recommended for more severe cases or when topical treatment fails. Antibiotics should cover Staphylococcus aureus. Topical options include triple antibiotic ointment or mupirocin after each warm soak; neomycin-containing compounds are discouraged due to a risk of allergic reactions (approximately 10%).[1] For oral antibiotics, dicloxacillin (250 mg four times a day) or cephalexin (500 mg three to four times a day) are effective choices.[3] Anaerobic coverage should be considered if there is a concern for oral

	inoculation (nail biting/finger sucking); in these cases, clindamycin or amoxicillin-clavulanic can be prescribed.[3] Additionally, Pseudomonas infections should be suspected if greenish discoloration appears in the nail bed. The treatment for paronychia with an abscess should be tailored to each patient's clinical situation and the physician's expertise. A straightforward, minimally invasive method is to use a nail elevator or hypodermic needle inserted at the junction of the affected nail fold and nail. Typically, incision and drainage serve as the adequate treatment for Acute paronychia; however, in certain situations where there is a significant extension of cellulitis, a more severe infection, or when the patient is immuno-compromised, oral antibiotics may follow the incision and drainage procedure. The antibiotic course is usually prescribed for five days, and clinicians may consider fluid culture to guide further treatment. To prevent paronychia, consider the following recommendations: apply moisturizing lotion after hand washing, avoid chronic exposure to irritants, prevent nail trauma and habits like biting or picking, refrain from cutting cuticles or using cuticle removers, improve glycemic control in diabetic patients, maintain cleanliness and dryness of affected areas, keep nails short and use rubber gloves—preferably with a cotton liner—when exposed to moisture and irritants.
Summary	Acute paronychia is a common infection of the nail fold that can be effectively managed in Urgent Care settings through prompt recognition and appropriate treatment. Most mild cases can be resolved with warm soaks and topical antibiotics. However, if an abscess is present, it will require incision and drainage. Oral antibiotics should be considered for cases involving extensive cellulitis, more severe infections, immunocompromised patients, or suspected MRSA infections. Preventative measures, such as avoiding nail trauma and limiting exposure to excessive moisture, are essential in reducing the risk of recurrence. Urgent Care clinicians should also be alert for potential complications, such as deep-space infections (like felons) or chronic paronychia. By adhering to best-practice guidelines for diagnosis, treatment and patient education, clinicians can ensure optimal outcomes while minimizing unnecessary antibiotic use and invasive procedures.
References	1. *https://www.aafp.org/pubs/afp/issues/2017/0701/p44.html*

	2. *Shaw J, Body R. Best evidence topic report. Incision and drainage preferable to oral antibiotics in Acute paronychia l nail infection? Emerg Med J. 2005 Nov;22(11):813-4. doi: 10.1136/emj.2005.030163. PMID: 16244344; PMCID: PMC1726584.* 3. *Dulski A, Edwards CW. Paronychia. [Updated 2023 Aug 7]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK544307/*
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Ask an Expert: An Interview with an ENT

Erin Loo, PA-C

As I write this, we are in the throes of respiratory season, so much flu. Soon, this will give way to spring allergies when everything is blanketed with a yellow dusting of pollen. Summer will bring swimmers' ear and fall will bring sinus infections. Knowing this, we should all be almost experts in ENT or at least experts in the most common ENT presentations in Urgent Care. Based on the JUCM Urgent Care chart review from 2023, the ear, nose and throat complaints of sore throat, ear pain and sinus congestion were in the top 5 chief complaints and ultimately, ENT diagnosis codes made up almost 40% of Urgent Care visits in 2023 (1). But what does an actual ENT expert have to say about these chief complaints in Urgent Care? I sat down with Lorin Catalena, PA-C, a local physician assistant with over 20 years of experience in ENT to discuss how we as Urgent Care clinicians can appropriately diagnose and treat common ENT complaints. She also shared a few pearls and can't miss presentations that need urgent ENT follow-up. Our conversation is below and has been edited for length and clarity.

Can you introduce yourself and share a little bit of your background?
I'm Lorin Catalena. I graduated from Texas A&M in 1997 and gained admittance into the Baylor College of Medicine PA program and graduated in 2000. I went straight into Pediatrics in College Station, Texas and I was there for four years. I've been an ENT and allergy PA for over 20 years now. I am also a faculty clinical instructor for the Texas A&M College of Medicine. I teach medical students physical exam skills and participate in community learning panels. Much of my time is also attending a graduate program for pre-medical school students teaching physical exam and patient communication skills, medical ethics and clinical decision making. I also serve on the admission committee for this highly competitive master's program and mentor students on career decisions and application preparation.

We are going to talk about the three most common ENT chief complaints in Urgent Care. I wanted to ask you to give me your approach, focusing on the things that we as Urgent Care clinicians should be looking for. Help us identify the key things in ENT management, consideration of antibiotic and steroid stewardship and then any tricks of the trade you would like to share. And what can we do to maximize our patient referrals to you, what makes a good referral and accessing our ENT friends wisely.

Well, first of all, I would like to say that Urgent Care does a phenomenal job, but if you find yourself in a situation where a patient needs to urgently seek ENT help, you might be onto something. So, I think it's important that Urgent Care has an alliance with local ENTs so the clinicians in the ENT practice know your name, your business and your credentials. You want them to pick up the phone when you call. ENT practices know that they should be accessible to you because we're dealing with the airway and a lot of ENT cases are very critical. In our practice at Texas ENT and Allergy in College Station, we have a policy where we will see patients from clinicians, whether that's advanced practice clinicians or physicians from our local community, as soon as we need to.

There are a lot of clinicians who don't have that kind of access to ENT consults, so I think that makes it even more important that you explain the red flags when we need to be sure our patient gets seen, or if they can't be seen, send them to the emergency room. So, let's start with talking about sore throat.

Yes, sore throat. Obviously, the first thing, the first pearl, is to examine your patient. We all know, it can be challenging to secure a pediatric patient to do a good oral exam. You need good lighting, and you need to direct the parent or your medical assistant in the room with exactly how to secure that patient. Have good confidence in the room, you direct everything. That is your world while you're examining your patient. I always tell my parents of the patient, "This is what I need you to do so that this can be done really quickly and very well."

Most sore throats are viral and it's typically going to come with a runny nose, cough and maybe some hoarseness or fever. Symptoms escalate quickly and in most cases around day four they start to abate and plateau. This is a typical viral course and a sore throat that just needs a little bit of time and some symptomatic care.

Strep throat is something that a lot of patients fear that they have. Most of us have rapid strep tests available and those can be helpful. Not everyone needs a test, but you should have a low threshold for administering a rapid strep test, as strep throat is the most common problem that needs to be treated with antibiotics. Strep typically has that red petechial rash on the soft palate and a distinctive odor.

Mononucleosis is something that can be horribly painful. I see it often in college students. I tell my students and grad students, do not share each other's drink. Do not drink after each other. The Dr. Pepper sip is not worth it. Some of the worst pharyngitis cases I've seen have been mono. And with experience, you get good at identifying it.

You can get candida in the oropharynx and that can look like white plaques. Think about the history. Is this an immunocompromised patient? Maybe someone who's on chemotherapy? Or if they're using an inhaled steroid, or if they've been sick for other reasons and were recently on steroids or antibiotics. Those are typically the patients that get candida.

And then very typically in our area, we see patients with allergies. Allergies cause postnasal drainage that can cause sore throat, but also other symptoms like clear runny nose and congestion. It's usually seasonal or when patients are deep cleaning a home, working with their cattle or horses or bringing down the Christmas decorations. Asking about activities happening in the patient's life certainly could trigger something in the history. The patient's history can give you a lot of clues.

What's your approach if you see someone with huge erythematous tonsils and they are negative for mono and they're negative for strep, do you treat them? What's the ENT approach to that?

Patients want to know that you are taking them seriously, but you can say, "it's not strep. It's very unlikely that this is bacterial. I want you to hydrate, I want you to take an anti-inflammatory." Give

them specifics on symptomatic care. Be sure that they realize that they're likely contagious and they need to be cautious around their roommates or other siblings, stay home from school and work while they have a fever and then have close follow up because most of these patients will get better with little intervention. If the symptoms are very severe including severe pain and difficulty swallowing and the tonsils are very enlarged, sometimes in the ENT office we will treat patients with either oral or injected corticosteroids to help with symptomatic relief.

Any other noninfectious causes of sore throat we should be aware of?

Okay, so another pearl. Another cause of sore throat is GERD or gastroesophageal reflux disease. It's a different type of sore throat. Typically, it's more of a globus sensation or that foreign body sensation. Sometimes I see they have a stinging or rough sensation in their throat, but it's just not the same history as a viral pharyngitis.

Cancer, of course, needs to be on the list. You're doing your exam and you find a lesion that may need to be biopsied. An ENT will be able to do that for you.

I would say briefly, a very small segment of pharyngitis is from irritant exposure or overuse. For example, maybe the patient had recently attended a concert or football game or was exposed to a toxic irritant.

What are some red flags that we need to consider? Who should we emergently send to you for evaluation?
I think peritonsillar abscess is at the top of the list. If they have a hot potato voice, that is a classic finding. If you've never heard it, it might be hard to understand what a hot potato voice sounds like, but it's almost like they have a gold ball in their mouth. The patient won't want to open their jaw for you to get a good exam. It can be dramatic and can escalate quickly. If you are able to see in the back of the throat, you would likely notice asymmetry with one tonsils either appearing larger or protruding toward the midline. The uvula may appear deviated and the soft tissue above the tonsil may be indurated. That patient needs to see ENT that day, or if ENT is not available, go to the Emergency Department.

Any other thoughts on treatment for sore throat?

For sore throat in general, most can be managed in the Urgent Care setting. Treat based on etiology, is it viral, allergy, bacterial, is there a positive rapid strep? If it's strep, treat with amoxicillin. We pay a lot of attention to antibiotic stewardship, so I would be sure that when you use an antibiotic, it's not just so the patient won't be upset. In my practice in ENT, sometimes I will go a whole week without prescribing any antibiotics to my patients. If you think about 80% of what we're dealing with is a viral infection, most of what we see doesn't need an antibiotic. For noninfectious causes, if it's reflux, consider a PPI. If it's allergies and postnasal drainage, consider a nasal steroid spray or antihistamine nasal spray. This is another time to have close follow-up. If a patient is not responding as expected to treatment, they might need to be seen by an ENT.

Talk to me about tonsil stones because it seems I frequently have patients come in and that is what they're most concerned about, “I have tonsil stones.”

We see this a lot in ENT and patients worry about their tonsil stones because they can feel them in there and they can cause bad breath. Patients can begin to obsess about them. Patients will go in with cotton swabs and try to dig them out, but it's not good for patients to be going inside those crypts. This only makes the pain worse and really, we should just be reassuring our patients that this is not infectious. It doesn't lead to chronic tonsillitis; it is just debris from saliva and normal functions. It does not need treatment. Many patients get relief from gargling with salt water or gently irrigating the crypts with a Water Pik. However, the only definitive treatment for it is a tonsillectomy. And so if the patient says, “It's embarrassing, it bothers me all the time, it gives me bad breath, I'm self-conscious and continually aware of my tonsil stones,” then absolutely we could discuss a tonsillectomy for that reason.

Okay, moving on to ear pain. Similar questions, what is your approach to ear pain.

I see a lot of ear pain in ENT. Again, examine the patient and get really comfortable with your skills. A lot of clinicians haven't been looking at ears in a critical way and have questions about what they're seeing, I tell my students, I don't really care what your patient is coming in for, look in their ears until you have acquired a sense of what is normal.

When it comes to ear pain, we think of primary ear pain and secondary ear pain. So, of course, otitis media, otitis serous and otitis externa are primary causes of ear pain.

Very often in ENT, we see patients who come in for recurrent ear infections and they are in their 30s to 50s. That's not an age range where we typically see fluid in the ears or fluid developing into otitis media. They're wondering if they need tubes in their ears. It can be a challenging conversation to look in the ears and say, “There is no fluid. Not only is it not red, but the ear drum is not opaque or dull. I have no concerns about your ears. Everything looks textbook perfect.” When this happens, patients get dissatisfied with their appointment because they are hearing contradictory information from multiple clinicians.

It is important to distinguish otitis media, otitis serious and otitis externa. Those are primary reasons for ear pain. In otitis serous, on exam there's just a dullness to the eardrum and you are not able to see the ossicles as clearly. Sometimes, you can see an air fluid level or bubbles, which is very helpful. Of course, you can always have the patient Valsalva and see if you can distinguish that the eardrum is moving. That can be a challenging skill, but with practice, it can be super useful and it takes absolutely no time.

What I would recommend is that every Urgent Care have a portable tympanometer. Tympanometry measures the movement of the tympanic membrane in response to changes in pressure. In essence, the tympanometer mimics the same process that happens when patients Valsalva during an ear exam. The TM should move due to increased intraabdominal pressure. Normal movement in the TM with pressure in the external auditory canal generated by the tympanometer is graphed by

a bell-shaped curve. Lack of movement causes a flat line. This result is most common in otitis serous, otitis media, or a perforated TM because the TM is not moving in response to the increased pressure. But if the TM moves in a bell-shaped curve, that is an air-filled TM which is normal and no fluid or OM is present.

Tympanometry is useful in steroid or antibiotic stewardship too, because then you're not using antibiotics just to placate the patient. You as a clinician can feel confident not writing that antibiotic prescription and the patient sees and understands the objective evidence from tympanometry.

On the topic of antibiotics, any tips on treatment for otitis media?

We mentioned antibiotic stewardship with sore throat and otitis media is similar. In otitis media, if an antibiotic is necessary, it must be the appropriate antibiotic. You don't want to give azithromycin for otitis media. First line would be high dose amoxicillin unless the patient has had resistance in the past, but with close follow up. Second-line or for treatment failures, we prescribe amoxicillin-clavulanate. Cefdinir would be another very good medicine after amoxicillin. It is important to prescribe the appropriate antibiotic, dose and duration.

You mentioned secondary causes of ear pain.

The most common cause of secondary ear pain is TMJ. Again, examine your patient. Putting a couple of fingers just anterior to the tragus is helpful in diagnosing TMJ. Have the patient open and close their jaw. Can the examiner feel crepitus or distinguish a clicking or popping of the jaw, or does the jaw move laterally in that process? If the middle ear has a normal exam, the cause of the ear pain is often TMJ. This is a time to use your portable tympanogram and say, “Look, this is not an ear infection and you don't have fluid, but you're clenching your teeth, or you've got arthritis in that TM joint.” Some of these patients have been on five antibiotics in the last six months for ear infections and now you must explain it’s not OM, it’s TMJ. That's a tough conversation. Instruct the patient to stop chewing gum or ice and a 5–7-day window of eating foods that are easy to chew. Throughout the day, relax, open the jaw, relax the mouth, be aware of what they're doing when they're working and pay attention to good posture. All of these can alleviate jaw pain.

Eustachian tube dysfunction is when patients feel that their ears are plugged as if there is fluid on the ear, but the source is nasal congestion. This is most often allergy or viral-induced and nasal steroid sprays like fluticasone or budesonide can be helpful. I will say, it is a frustrating process for patients because their hearing is impacted. They will want an antibiotic. This is a situation where Urgent Care could start treatment with fluticasone and then send them to ENT for an audiogram and possibly nasal endoscopy.

Other causes of ear pain include post-tonsillectomy pain, referred pain from the throat, allergies and sinusitis. So, examine your patients and look for normal ears and then coach the patient that not everything is as it seems. In adults with unexplained ear pain, it is important that other causes of referred pain are ruled out and should be referred to ENT for further evaluation.

Okay, so now we're going to talk about, I put this in quotes, “Sinus infections.” I feel like every patient with one day of congestion is convinced that they have a sinus infection because they have a history of the diagnosis of sinus infections, or they have green mucus. So, what is your approach to sinus congestion/sinus infections?

I looked up some stats. 1 in 8 adults in the US are diagnosed with sinusitis a year (2). So, 30 million diagnoses annually are sinusitis, whether that's acute or chronic. And, one in five antibiotic prescriptions in the US are for sinusitis. So, it is a lot of your practice, I'm sure, in Urgent Care, because patients want help fast. You're likely the only ones that will see them on a walk-in basis.

Like everything else we've talked about, it's important that we're actually making accurate diagnoses. So acute rhinosinusitis implies symptoms including purulent nasal discharge, number one and either nasal obstruction or facial pressure. Usually for 10-14 days or a “double worsening” meaning symptoms briefly improved, but then significantly worsened again. Less than four weeks of symptoms implies acute rhinosinusitis; longer than 12 weeks is considered chronic. But remember, a lot of things can happen in our atmosphere where we get a headache and the patient feels facial pressure, but that doesn't necessarily need an antibiotic.

And how does that differ from the patient who just says, “I have green mucus”? What is your distinction?

This is purulent mucus throughout the day, day after day. When someone says their mucus is green, I tell them mucus is going to be green in the morning, because our mucus oxidizes when it settles overnight. And I think most people understand that. It's going to turn a color. When you wake up in the morning and you've got a glob of mucus and you spit it out, expect it to be brown, expect it to be green. We don't want to be giving a patient antibiotics for no reason. Again, like everything else, most mucus is not bacterial.

We generally don’t prescribe antibiotics for sinus related symptoms that have been present for less than seven days unless there is evidence of complicated sinusitis (which is very rare). If they do meet criteria for acute bacterial rhinosinusitis, then let's give them an appropriate antibiotic. And so once again, ENT has made it easy, our first choice is amoxicillin-clavulanate. But we pay attention to antibiotic stewardship by using it for the correct length of time.

Is there a point with congestion in general to be concerned about obstruction or a mass? When should we be sending those patients to ENT.

If there is unilateral nasal discharge, in a kid especially, or maybe someone with some developmental challenges, that is a foreign body until proven otherwise. And that patient, you could start first line antibiotic and then get them into ENT for a nasal endoscopy.

We already talked about otitis serous but, typically adults are not going to have ear infections. Adults are not likely to have fluid chronically in only one ear. That can be a sign that there may be some sort of obstruction or mass in the nasopharynx. If a patient has unilateral symptoms or if

something about their history seems to be suggestive of a true obstruction, that patient needs to get in to see an ENT within the week for a nasopharyngoscopy.

What is your take on steroids with congestion and sinus infections? Because it seems like in our attempt to be good stewards of antibiotics, we have swapped out steroids for antibiotics. What do you see as the role of steroids and that kind of patient?

Oral or systemic steroids are typically not indicated in an Urgent Care setting and so I much prefer topical nasal steroid sprays. They are safer and don't increase heart rate or disrupt sleep. Of course, there's a downside to anything that has upsides and that is that they take longer to be maximally effective and therapeutic. Whenever a nasal steroid spray is prescribed, the patient needs to know this possibly could work for you in the short term, but most patients find that this medicine is maximally effective three weeks down the road from when it is started. It is not that they can't get some improvement before that, but they need to know, this is something that is worth investing time in. There are few negatives to topical nasal steroids but they can thin the nasal mucosa which can lead to dryness and nosebleeds in some people.

Lorin, thank you so much for your time. Thank you for partnering with your local Urgent Cares to give our patients such great care.

Take Away Points

- *Examine your patient!*
- *Sore throat is typically viral. Remember antibiotic and steroid stewardship and use these medication only if indicated. Consider noninfectious etiologies such as GERD and allergic rhinitis. (3)*
- *Peritonsillar abscess is an emergent condition that needs evaluation by ENT or ED. (3)*
- *Remember that many causes of ear pain are noninfectious. Consider etiologies such as TMJ, referred pain from the throat, eustachian tube dysfunction. (4)*
- *Tympanometry has application in the Urgent Care setting to distinguish between OM and other causes of ear pain. (5)*
- *Clinical Guidelines for antibiotic management of acute Otitis Media (6):*
- *First Line: High Dose Amoxicillin (80-90 mg/kg) divided into two doses, duration depends on age)*
- *Treatment Failure or Amoxicillin in last 30 days: Amoxicillin/Clavulanate (High dose Amoxicillin component 90 mg/kg divided in 2 doses)*
- *Penicillin Allergy: Cefdinir, Cefuroxime, Cefpodoxime. AAP recommends single dose Azithromycin (10 mg/kg)*
- *Not all nasal congestion is bacterial rhinosinusitis. Consider viral causes, allergies, or obstruction. Remember antibiotic and steroid stewardship. (7)*
- *Counsel your patients that topical nasal steroid sprays are useful in sinusitis, but it may take several days to see full benefit.*

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The Hair Apposition Technique: a Pain-Free, Tear-Free Approach to Scalp Lacerations!

Katy Almeida, PA-C

It's 10 minutes until the end of your shift and you're finishing up your last note for the day…or so you think. Right on cue, in walks a frantic parent with a crying child and a scalp full of bloody, matted hair.

Scalp lacerations are painful, messy, and tricky to tackle with suture strings getting lost amongst a sea of hair.

But what if there was a quicker, easier, pain-free way to get those scalp wounds closed that didn't involve sutures or staples?

Meet Your New Best Friend: The Hair Apposition Technique

The Hair Apposition Technique (HAT) uses the patient's own hair to close small scalp lacerations. No needles, no sutures, no staples. Just twist, glue, and go.

When to Use the Hair Apposition Technique

- ***Small, superficial scalp lacerations****: works best for lacerations only a few cm in length and with no involvement of deeper layers like muscle or fascia.*
- ***Clean, linear wounds****: Wounds that align naturally without significant tension.*
- ***Pediatric patients!*** *I think the reasoning here is obvious.*

How to Perform the Hair Apposition Technique

1. ***Irrigate and examine the wound****: Begin by thoroughly irrigating the scalp laceration. Carefully assess the wound to ensure that the edges align naturally without significant tension.*
2. ***Twist hair on either side of the wound****: Select 3-7 strands of hair from either side of the laceration. Twist these hair strands together to create a tight bundle that will help provide a strong closure.*
3. ***Interlock the hair bundles****: Take the two twisted hair bundles and* ***interlock them in a 360-degree revolution****. As you twist the two bundles together, it will bring the wound edges closer. The intertwined hair will act as a natural "suture," securing the wound edges in place.*
4. ***Apply tissue adhesive****: Once the hair bundles are interlocked, apply a small amount of* ***tissue adhesive*** *(e.g., Dermabond) to secure the hair bundles in place while the wound heals.*
5. ***Repeat if necessary****: For longer lacerations, repeat the process along the entire length of the wound.*

Aftercare for HAT Closures

The best part? No need to return for suture or staple removal! The hair will naturally unravel on its own within 7-10 days, and the wound will heal during this time.

- *Avoid wetting the wound for 24-48 hours*
- *Monitor for infection*

- ***Avoid tugging on the hair****: The patient should avoid combing or brushing the hair near the wound to prevent dislodging the hair bundles.*

When NOT to Use the Hair Apposition Technique

While the Hair Apposition Technique is an excellent method for many scalp lacerations, it is not suitable for all cases. It should be avoided in the following situations:

- *Scalp lacerations longer than 10 cm.*
- ***Grossly contaminated wounds****: If the wound is heavily contaminated, HAT is not appropriate. Proper wound debridement and irrigation should be performed before considering more traditional closure techniques.*
- ***Active and uncontrolled bleeding****: If there is active bleeding that cannot be controlled, the wound should be closed using traditional closure techniques.*
- ***Significant wound tension****: HAT will not provide an adequate closure if the wound edges cannot be approximated without excessive tension.*

No mess, no stress

The Hair Apposition Technique is a simple, effective and patient-friendly alternative to traditional wound closure—especially for kids and anyone who (understandably) isn't thrilled about getting stitches or staples.

So the next time you've got a scalp lac with a whole lot of hair and not a lot of time, remember: twist, glue and go.

To our short-haired patients: we're sorry.

To our long-haired laceration patients? You're welcome.

Check out more on Urgent Care RAP here!

Urgent Care Evaluation and Management of Elbow and Forearm Pain in Children

Excerpted from Pierre N. Urgent Care evaluation and management of elbow and forearm pain in children. *Evidence-Based Urgent Care*. April 2025. © EB Medicine

Editor's Note: The following content is a summarized excerpt from the cited article. It is not an exhaustive review of the condition but rather a focused highlight of the key points.

Introduction

Elbow and forearm pain in children represents a common yet challenging presentation in Urgent Care settings. These injuries encompass a broad spectrum of conditions, from minor self-limiting issues to serious complications requiring immediate intervention. The unique anatomy of growing children, combined with challenges in obtaining reliable histories and performing examinations, makes accurate diagnosis particularly difficult.

The pediatric elbow joint differs significantly from adult anatomy due to the presence of growth plates, multiple ossification centers, increased cartilage content and weaker ligaments that make the joint more flexible but also prone to unique injury patterns. Understanding these anatomical differences is crucial for proper evaluation and management.

Epidemiology

Falls are the primary cause of acute elbow injuries in children, with falls on an outstretched hand (FOOSH) being particularly common in playground activities, contact sports and recreational activities.[2] These mechanisms frequently result in supracondylar fractures, radial head fractures, lateral condyle fractures and Monteggia lesions.[1]

Chronic elbow and forearm pain in children and adolescents often stems from overuse and repetitive motion. Repetitive valgus stress in overhead-throwing sports can result in Little League elbow (medial epicondylar apophysitis),[5,6] while osteochondritis dissecans of the capitellum and olecranon apophysitis are commonly seen in gymnasts and weightlifters due to excessive joint loading.[7] (See Table 1.)

Table 1. Causes of an Immobile Arm in Children

Cause	Description
Radial head subluxation (nursemaid's elbow)	Caused by sudden pulling of the arm; very common in children aged 1 to 4 years
Fracture	Any upper extremity fracture (clavicle, humerus, elbow, forearm) can lead to refusal to move the arm
Septic arthritis	Infection in the joint causing pain with any movement
Osteomyelitis of humerus or forearm	Bone infection causing pseudoparalysis (loss of movement due to pain)
Brachial plexus injury	Injury to the brachial plexus; eg, birth injury (Erb palsy) or trauma in older children
Neurologic injury	Nerve palsy in infants; rare in children
Nonaccidental trauma	Pain from an abusive injury; child may avoid using the injured arm due to pain, or a caregiver may report nonuse

Anatomy

The pediatric elbow consists of the humerus, radius and ulna, each containing growth plates (secondary ossification centers) that remain open throughout childhood and adolescence. These centers appear in a predictable sequence, typically 1 year earlier in girls than boys.[8]

The **CRITOE mnemonic** helps recall the order of ossification center development:

- ***C**apitellum (1 year)*
- ***R**adial head (3 years)*
- ***I**nternal (medial) epicondyle (5 years)*
- ***T**rochlea (7 years)*
- ***O**lecranon (9 years)*
- ***E**xternal (lateral) epicondyle (11 years)*

Since growth plates remain structurally weaker than surrounding bone and ligamentous tissue, pediatric elbow injuries often involve physeal fractures rather than ligament tears, differentiating them from adult injuries.[8]

Differential Diagnosis

The causes of elbow and forearm pain in pediatric patients vary widely, ranging from mild musculoskeletal conditions to serious limb-threatening emergencies. **(See Table 2.)**

Table 2. Differential Diagnosis of Pediatric Nontraumatic Elbow Pain

Condition	Symptom Onset	Key Features	Mimics
Osteochondritis dissecans	Gradual	Adolescents involved in repetitive overhead or weight-bearing activities, lateral elbow pain, mechanical symptoms (locking/catching), potential loose body formation	Panner disease, lateral epicondylitis
Little League elbow (medial epicondylar apophysitis)	Chronic, progressive	Young throwing athletes, medial elbow pain, tenderness over medial epicondyle, pain with valgus stress	Medial epicondylitis, ulnar collateral ligament injury
Olecranon apophysitis	Gradual	Adolescent athletes with repeated triceps contraction (eg, baseball pitchers, gymnasts), posterior elbow pain, tenderness over olecranon	Stress fracture, triceps tendinopathy
Nursemaid's elbow (radial head subluxation)	Acute	Toddler pulled by an extended pronated arm, immediate refusal to use arm, held in slight flexion and pronation, no swelling or bruising	Elbow fracture, ligamentous injury
Juvenile idiopathic arthritis	Insidious	Chronic joint swelling, morning stiffness, limited range of motion, systemic symptoms in polyarticular type	Reactive arthritis, infection
Septic arthritis	Acute	Febrile, painful swelling, severe pain with passive movement, refusal to use the arm, elevated inflammatory markers	Osteomyelitis, reactive arthritis
Osteomyelitis	Acute or subacute	Gradual worsening of localized pain, often with fever, may present with vague symptoms before visible bone involvement	Septic arthritis, malignancy
Ewing sarcoma, osteosarcoma	Progressive	Persistent bone pain, night pain, possible swelling or mass, systemic symptoms (eg, weight loss, fatigue) in advanced disease	Osteomyelitis, benign bone cysts

Urgent Care Evaluation

History

- *Mechanism of Injury:*
  - *Height and surface of fall*
  - *Position of landing (FOOSH vs direct blow)*
  - *Whether witnesses observed the mechanism*
  - *Any audible "pop" during injury*
- ***Pain Characteristics:*** *Understanding pain location, quality, radiation, onset, progression, and modifying factors helps guide diagnosis. Young children may not accurately grade pain levels, so behavioral observations from parents become crucial.*
- ***Systemic Symptoms:*** *Fever, chills, malaise and weight loss may indicate serious conditions like septic arthritis, osteomyelitis or malignancy. Multi-joint involvement suggests rheumatologic disease.*
- ***Sports History:*** *For overuse injuries, assess training frequency, recent increases in activity, technique and sport-specific movements.*

Physical Examination

- ***Observation:*** *Note how the child holds the affected arm before touching. Key observations include:*
  - *Arm held pronated, flexed, close to body (suggests nursemaid's elbow)*
  - *Child supporting injured limb with opposite hand (suggests fracture/dislocation)*
  - *Visible swelling, bruising or deformity*
- ***Palpation:*** *Gently examine the entire elbow and forearm, comparing both sides. Key areas include medial and lateral epicondyles, olecranon, radial head, ulnar and radial shafts, and distal radius.*
- ***Range of Motion:*** *Evaluate active and passive motion at the elbow (flexion/extension), forearm (supination/pronation) and wrist when possible.*
- ***Neurovascular Assessment:*** *Always check radial and brachial pulses, capillary refill, and motor/sensory function of median, ulnar, and radial nerves.*

Diagnostic Studies

The initial imaging modality of choice remains plain radiographs, which are crucial for diagnosing fractures, assessing joint alignment and identifying conditions such as osteomyelitis or bone tumors.

Radiographic Studies

When obtaining elbow radiographs, at least three standard views should be included:[8]

- *Anterior-posterior (AP) view*
- *Lateral view*
- *Oblique view*

The key anatomical relationships to assess are:

- *Anterior humeral line: A line drawn along the anterior humerus should intersect the middle one-third of the capitellum. If misaligned, consider a supracondylar fracture.*
- *Radiocapitellar line: A line through the radial shaft should pass directly through the center of the capitellum. Deviation suggests a radial head dislocation (also known as a Monteggia fracture or dislocation).*
- *Anterior fat pad sign (also called the "sail sign"): A normally concave anterior fat pad may be displaced anteriorly by an occult fracture with an associated joint effusion.*
- *Posterior fat pad sign: Normally not visible, its presence is highly suggestive of an occult fracture, even in the absence of obvious cortical disruption.*[18]

Following the ALARA principle ("as low as reasonably achievable") is crucial for pediatric patients.[19] Children are more radiosensitive than adults due to higher rates of cell division and longer life expectancy.[10] Radiographs should only be ordered when clinically indicated, and alternative modalities like ultrasound and MRI should be considered when appropriate.

Alternative Imaging

Ultrasound provides radiation-free evaluation for joint effusions, occult fractures and soft tissue abnormalities. It is particularly useful for distinguishing septic arthritis from transient synovitis.[21] Magnetic resonance imaging is preferred for occult fractures, osteomyelitis and ligamentous injuries but may not be available in all Urgent Care facilities.

Urgent Care Management

The treatment approach for pediatric elbow and forearm pain depends on whether the etiology is traumatic or nontraumatic (ie, overuse, inflammatory, or neuropathic). Proper identification of the underlying cause ensures appropriate management and helps prevent long-term complications such as deformity, chronic pain and functional limitations.

Nontraumatic Injuries and Overuse Conditions

Radial Head Subluxation (Nursemaid's Elbow)

- *Reduction should be performed using either the hyperpronation technique or the supination-flexion technique, with the hyperpronation method having a higher success rate of approximately 95% on first attempt.*[22]
- *A successful reduction is typically indicated by an audible or palpable click, followed by the child's immediate return to normal arm function before discharge.*

- *No immobilization is needed post-reduction, and parents should be counseled to avoid pulling the child's arms.*
- *If fracture is suspected, immobilization with long-arm posterior splint and sling, along with pain control, is recommended.*
- *Persistent symptoms warrant follow-up with orthopedics within 1 week.*[22]

Medial Epicondylar Apophysitis (Little League Elbow)

- *Management begins with a period of rest from throwing activities for approximately 4 to 6 weeks to allow the affected area to heal.*[5,6]
- *Pain relief can be achieved using nonsteroidal anti-inflammatory drugs (NSAIDs) and ice application to reduce inflammation and discomfort.*
- *Physical therapy plays a crucial role in recovery, incorporating shoulder and elbow strengthening exercises to improve stability and prevent future injury.*
- *Once pain is resolved, a gradual return-to-throwing program is implemented to ensure a safe and controlled progression back to full activity.*

Lateral Epicondylitis (Tennis Elbow) and Medial Epicondylitis (Golfer's Elbow)

- *Activity modification is necessary, requiring individuals to limit repetitive movements that aggravate the condition.*[14]
- *Using a forearm strap can help reduce stress on the affected tendons, providing additional support during activities.*
- *Physical therapy should be prescribed, using eccentric strengthening exercises that improve tendon resilience.*
- *Nonsteroidal anti-inflammatory drugs (NSAIDs) and icing can help alleviate symptoms by reducing inflammation and pain.*

Juvenile Idiopathic Arthritis

- *Patients presenting with suspected juvenile idiopathic arthritis can trial NSAIDs for pain management.*[23]
- *Patients should be referred to their primary care provider or a rheumatologist for disease-modifying antirheumatic drugs, such as methotrexate.*
- *Biologic therapy should be considered if needed.*

Ulnar Neuropathy

- *Management of ulnar neuropathy includes night splinting and activity modification.*[24]
- *Surgical decompression is recommended for refractory cases.*

Traumatic Elbow Injuries

Elbow fractures account for 10% of pediatric fractures, with FOOSH injuries being the most common mechanism.[8] The priority is to rule out neurovascular compromise, displaced fractures or

open fractures that require urgent ED referral. All fractures require orthopedic consultation; however, depending on the stage or type, more urgent management may be necessary.

See Table 3 for the mechanism of injury and initial urgent care management of the most common fracture types.

Table 3. Initial Urgent Care Management of Pediatric Elbow Fractures

Fracture Type	Mechanism of Injury	Initial Management
Supracondylar fracture	FOOSH, hyperextension	Pain management, long-arm splint, same-day urgent orthopedic referral if displaced
Lateral condyle fracture	FOOSH with valgus stress	Pain management, splint, orthopedic consultation
Torus (buckle) fracture	Axial compression, FOOSH	Pain management, wrist splint (3-4 weeks), no casting required; follow-up with PCP
Complete forearm fracture	FOOSH, direct trauma	Pain management, sugar-tong splint, orthopedic referral as soon as possible
Greenstick fracture	FOOSH, bending force	Pain management, short-arm cast, orthopedic consultation
Open fracture	High-energy trauma	Pain management, ED referral
Growth plate (Salter-Harris*) fracture	FOOSH, direct impact	Pain management, splint/cast, orthopedic consultation (routine or urgent, depending on type)
Monteggia fracture	FOOSH	Pain management, same-day urgent orthopedic or ED referral for surgery

* The Salter-Harris classification system categorizes growth plate fractures into five types based on the fracture location and involvement of surrounding structures:

- ***S: Slipped (type I) -*** *A transverse fracture through the growth (physis) plate without involving the bone.*
- ***A: Above (type II) -*** *A fracture extends above the growth plate and metaphysis, sparing the epiphysis. This is the most common type, comprising approximately 75% of cases.*
- ***L: Lower (type III) -*** *A fracture below the growth plate and epiphysis, sparing the metaphysis.*
- ***T: Through (type IV) -*** *The fracture passes through the metaphysis and epiphysis, crossing the growth plate.*

- ***R: Erasure of Growth Plate (type V) -*** *A compression fracture of the growth plate due to a crushing force, leading to a decrease in the perceived space between the epiphysis and metaphysis on x-ray. This is the least common type, making up about 1% of such fractures.*

Abbreviations: ED, emergency department; FOOSH, fall on an outstretched hand; PCP, primary care provider.

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Left Flank Pain in a 42-Year-Old Male: Point-of-Care Ultrasound Guides Management

By Tatiana Havryliuk, MD

Keywords: renal colic, hydronephrosis, hematuria, flank pain, point-of-care ultrasound, POCUS, bedside ultrasound, kidney stone, ureterolithiasis

Introduction

This case report describes the management of a 42-year-old male presenting with an acute onset of left flank pain, highlighting the utility of point-of-care ultrasound (POCUS) to help make the diagnosis and avoid unnecessary imaging and referrals.

Patient Information

A 42-year-old man with no significant past medical history presented with intermittent left flank pain for two days and one episode of non-bloody, non-bilious emesis. He denied dysuria, hematuria, testicular pain, fever, trauma or prior kidney stones. Family and social histories were non-contributory; he takes no medications.

Clinical Findings

Vital signs were normal (BP 128/78 mm Hg, HR 74 bpm, T 36.8 °C, RR 14, SpO_2 99 % RA). The patient appeared visibly uncomfortable, frequently shifting and rocking on the bed due to pain. Physical exam revealed mild left costo-vertebral angle tenderness. There was no abdominal tenderness or guarding. Genitourinary exam was unremarkable.

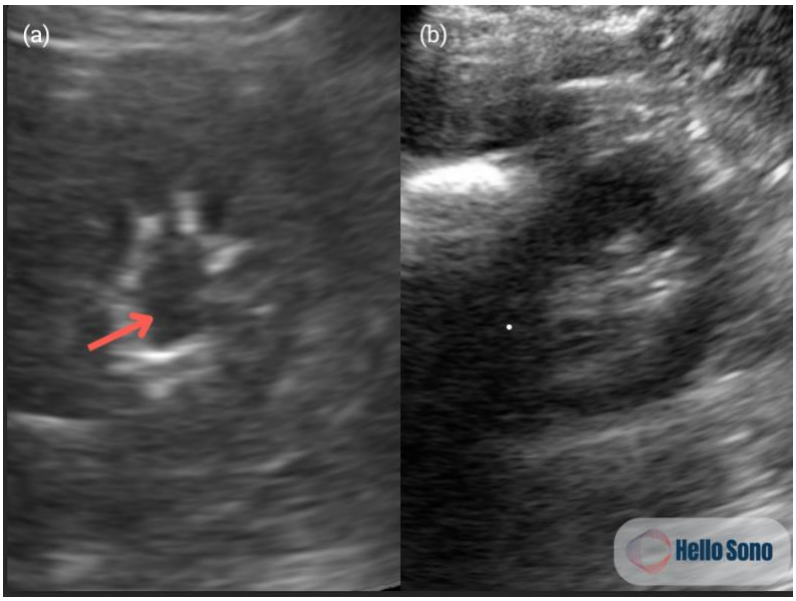
Timeline

Day 0: Onset of intermittent left flank pain

Day 2: Presented to Urgent Care, POCUS was performed and the patient was discharged to home.

Day 4: Telephone follow-up.

Diagnostic Assessment



Urinalysis revealed microscopic hematuria (7–10 RBCs/HPF) without leukocyte esterase or nitrites to suggest infection. Bedside renal POCUS demonstrated mild left hydronephrosis without perinephric fluid (**Figure 1**), normal bladder volume, and normal right kidney. Collectively, these findings supported a working diagnosis of uncomplicated ureterolithiasis causing mild obstruction.

Figure 1

Therapeutic Interventions

Treatment administered onsite included ketorolac 30 mg IM for analgesia and metoclopramide 10 mg IM for nausea. The patient was instructed to maintain liberal oral hydration, use NSAIDs as needed, and return for care if fever persisted or he experienced worsening pain or vomiting, or an inability to urinate developed.

Follow-Up & Outcomes

At the 48-hour telephone follow-up the patient reported complete resolution of pain, normal urinary output and no adverse events. A non-emergent outpatient urology follow-up was arranged within two weeks.

Discussion

Evidence

Bedside ultrasound offers a rapid, radiation-free pathway to evaluate suspected nephrolithiasis in low-risk patients. Studies report a pooled sensitivity of 84% (range 73–92 %) and specificity of 79% (range 55–83%) for detecting hydronephrosis with POCUS.[1-2] While POCUS is less sensitive for detecting mild hydronephrosis, it is highly specific (94.4%) for moderate to severe hydronephrosis which can guide management decisions in the emergency setting. [3] Taken together with strong safety data, these numbers make ultrasound a preferred first-line imaging choice in Urgent Care settings. The landmark randomized trial by Smith-Bindmanet al. showed that patients initially imaged with either emergency-physician-performed POCUS or formal radiology ultrasound experienced comparable serious-adverse-event rates, a two-thirds reduction in cumulative radiation and no increase in missed high-risk diagnoses compared with immediate CT. [4]

Who Should Get POCUS First?
The 2019 multispecialty consensus review by Moore,et al. recommends an ultrasound-first strategy—either clinician-performed POCUS or radiology ultrasound—for most uncomplicated flank-pain presentations. Key features include:

- *Age ≤ 50 years or pregnancy*
- *Classic unilateral flank pain with/without nausea or vomiting*
- *Microscopic hematuria on dipstick*
- *No fever, peritonitis or significant abdominal tenderness*
- *Pain adequately relieved with initial analgesia*
- *No solitary kidney, severe comorbidities or prior complicated stones*
- *Symptom onset < 48 hours*

In these scenarios, ultrasonography was preferred over CT in ≥ 80 % of panel votes, offering rapid diagnosis without radiation or transfer for advanced imaging. [5]POCUS-Guided Disposition

Ultrasound findings help stratify disposition. Mild hydronephrosis in an otherwise healthy patient strongly supports a ureterolithiasis diagnosis and permits discharge with analgesia and outpatient follow-up. No hydronephrosis should prompt consideration of alternative pathology or early obstruction. If uncertainty remains, repeat the ultrasound after hydration and reassess the patient. [4]

In contrast, moderate or severe hydronephrosis typically warrants a CT to delineate stone size and the location, and generally necessitates emergency department evaluation and timely urologic consultation for possible intervention.

Limitations of Renal POCUS for Flank Pain

- *Missed etiologies (e.g., aortic pathology): Focused renal scans do not visualize the abdominal aorta or other abdominal/pelvic structures; obtain dedicated imaging when presentation is atypical or suspicion for an alternate diagnosis persists.*
- *False negatives: Dehydration can hide hydronephrosis—repeat POCUS after fluids if uncertainty persists.*
- *Lack of stone visualization: Ultrasound shows obstruction, but often not the stone, especially if it's small; CT may still be needed for size and location.*
- *Operator & patient factors: Image quality varies with operator experience and patient body habitus; patients who fail outpatient analgesia or develop red-flag symptoms (fever, anuria, uncontrolled pain) should undergo definitive imaging.*

Taken together, renal POCUS is a valuable first-line tool that complements clinical assessment and shared decision-making in Urgent Care, provided its limitations are recognized and acted upon.

Impact

Avoiding a standard CT abdomen/pelvis without contrast in this otherwise healthy 42-year-old spared approximately 11 mSv of ionizing radiation, an equivalent of 560 chest X-rays [6-7].

Beyond radiation reduction, an abdominal/pelvic CT in the United States costs $500–$3,000, whereas bedside renal POCUS carries a global fee of $59 based on the nationwide Centers for Medicare & Medicaid Services physician fee schedule. [8-9] A focused bedside ultrasound takes about five minutes, while arranging CT from an Urgent Care setting typically requires transfer to an emergency department or imaging center, adding hours to the visit.

An ultrasound-first approach therefore lowers radiation exposure, reduces direct imaging costs, shortens length of stay, and keeps patients out of the ED. These benefits compound for patients with recurrent stones who might otherwise undergo multiple CT scans over their lifetime.

Patient Perspective

The patient appreciated the prompt assessment, rapid pain relief, and the ability to avoid an emergency department visit and CT imaging. The encounter with POCUS allowed him to return to work within two days.

Key Takeaway

Low-risk flank pain? Start with POCUS. In otherwise healthy patients with typical unilateral pain and microscopic hematuria, bedside ultrasound should guide further management and disposition.

About the Author

Dr. Tatiana Havryliuk is an emergency physician with over 15 years of clinical POCUS experience, the former Emergency Ultrasound Director at The Brooklyn Hospital Center in New York, and the founder of Hello Sono. Her mission is to streamline POCUS adoption in Urgent Care so clinicians can deliver faster, higher-quality care to their patients.

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URGENT UPDATES

Efficacy And Safety of Epaminurad, A Potent Hurat1 Inhibitor, in Patients with Gout: A Randomized, Placebo-Controlled, Dose-Finding Study

A recent study found that epaminurad is well-tolerated and effectively lowers serum uric acid (sUA) levels in patients with gout. Among 169 mostly male participants aged 19–70, those treated with epaminurad showed significantly greater sUA reductions than those on placebo, with response rates of 88.9% (9 mg), 71.8% (6 mg), and 54.1% (3 mg). Adverse events were mostly mild and occurred at similar rates across all groups, with no significant changes in kidney or liver function observed. **Full Access:** PubMed

Tryptyr Ophthalmic Solution Gets FDA Nod for Dry Eye Disease

The Food and Drug Administration (FDA) has approved Tryptyr® (acoltremon ophthalmic solution) 0.003% for the treatment of the signs and symptoms of dry eye disease. The approval of Tryptyr was based on data from 2 randomized, double-blind, vehicle-controlled studies. In both trials, patients with dry eye disease were randomly assigned to receive acoltremon ophthalmic solution 0.003% or vehicle eye drop twice daily for 90 days. **Full Access:** EMPR

Migraine Drug Ubrogepant May Ease Preheadache Symptoms

A recent study suggests that the migraine medication ubrogepant may help relieve **preheadache symptoms**, also known as prodrome symptoms, which occur before a migraine attack. These symptoms can include fatigue, mood changes, neck pain, sensitivity to light or sound, and difficulty concentrating. Researchers found that individuals who took ubrogepant during a migraine attack not only experienced relief from headache pain but also saw a reduction in these early symptoms. This expands the potential benefit of ubrogepant beyond just treating the headache itself, potentially improving overall quality of life for migraine sufferers. However, further research is needed to confirm these findings and determine how best to use the drug to target prodrome symptoms. **Full Access:** JAMA

Diphenhydramine: It is Time to Say a Final Goodbye

The article argues that diphenhydramine, a first-generation antihistamine, should no longer be used due to its ineffectiveness compared to newer alternatives and its significant side effects, such as sedation and cognitive impairment. Experts emphasize that second-generation antihistamines like cetirizine and loratadine are safer and more effective. The article urges healthcare providers and regulatory bodies to update guidelines and public messaging to discourage diphenhydramine use, especially in children. **Full Access:** World Allergy Organization Journal

Gut Microbiome in Adult and Pediatric Patients with Hidradenitis Suppurativa

The study found that both adult and pediatric hidradenitis suppurativa (HS) patients had distinct gut microbial profiles compared to healthy controls, including reduced microbial diversity and increased

abundance of pro-inflammatory bacteria. These changes may contribute to systemic inflammation and disease severity. The findings suggest a possible gut-skin axis in HS, opening the door for future therapies targeting the microbiome, such as probiotics, dietary modifications or fecal microbiota transplantation. **Full Access:** JAMA

Motorcycle Helmet Laws Save Lives: Study Shows Universal Laws Increase Helmet Use and Reduce Injury Severity

A study comparing North Carolina (with a universal helmet law) and South Carolina (with a partial law) found that universal helmet laws significantly increase helmet use and reduce injury severity in motorcycle crashes. Riders in North Carolina were more likely to wear helmets, had fewer severe injuries, and required less ICU care. The study advocates for universal helmet laws nationwide to improve safety and reduce healthcare costs; and supports reinstating universal helmet laws to save lives and reduce public health burdens. **Full Access:** American College of Surgeons

Objectively-Assessed Napping Behaviors Predict Mortality in Middle-to-Older Aged Adults

Middle-to-older-aged adults (average age ≈ 63) from the UK Biobank were monitored by actigraphy for seven days. Researchers found that *longer nap durations, greater day-to-day variability in nap length, and a higher proportion of naps around midday to early afternoon* were each independently linked to increased all-cause mortality over an 8–11 year follow-up period—associations that persisted even after adjusting for health, lifestyle, and nighttime sleep. The study suggests that tracking objective daytime napping patterns may help identify individuals at higher risk and inform interventions for healthier aging. **Full access:** Sleep Research Society

Tiotropium Initiation and Dementia Risk in Chronic Obstructive Pulmonary Disease

A recent cohort study examined the association between initiating tiotropium monotherapy and the risk of developing dementia in older adults with chronic obstructive pulmonary disease (COPD). The study found a small absolute increase in incident dementia among patients starting tiotropium compared to those initiating a combination of long-acting β_2-agonists and inhaled corticosteroids (LABA-ICS). However, the researchers noted that this increase was of questionable clinical significance, especially when weighed against tiotropium's established benefits in managing COPD symptoms and reducing exacerbations. Clinicians are encouraged to consider these findings in the context of individual patient needs and the overall therapeutic advantages of tiotropium. **Full Access:** JAMA

Oral non-benzodiazepine muscle-relaxants for people with acute and chronic primary low back pain: a systematic review with meta-analysis

A systematic review found that oral non-benzodiazepine muscle relaxants may provide a small, short-term reduction in pain for acute low back pain, but the effect is likely not clinically significant. There was little to no benefit for long-term pain or disability, and these drugs were linked to increased side effects like dizziness and drowsiness. The overall certainty of the evidence was low. **Full Access:** BMJ

Two AI Trends That Will Change Urgent Care

A recent article identifies two key AI trends transforming Urgent Care: ambient AI scribes**,** which automate clinical documentation during patient visits, and AI-driven front desk tools that handle tasks like scheduling and insurance verification. These innovations aim to boost efficiency, reduce staff burden, and improve patient experience—though careful implementation is essential to address potential challenges. **Full Access:** JUCM

CAUSE FOR APPLAUSE Q2 2025

The College of Urgent Care Medicine has a lot to celebrate this quarter. The College is pleased to welcome two new fellows while also recognizing its annual awardees announced during the 2025 Urgent Care Convention held in early May in Dallas, Texas. And finally, we are excited to introduce our new Affiliate Administrator.

Congratulations to CUCM's Q2 Fellows

Lisa Shakun, PA-C, MBA, FCUCM has earned the distinction of Fellow in the College of Urgent Care Medicine (FCUCM). Lisa has been with Yale New Haven Health Urgent Care (formerly Physician One Urgent Care) in Brookfield, CT since 2020, ascending to the role of Medical Director in 2024 where Jeanne Kenkare, DO, FCUCM and President of Yale New Haven Health UC, wrote, "In this capacity, she oversees more than 55 Advanced Practice Providers (APPs) and has been responsible for managing their quality, compliance, productivity and retention". Lisa was also a co-presenter on clinician engagement at the most recent Urgent Care Convention in Dallas, TX.

Lisa received her bachelor's degree in Kinesiology and Athletic Training from the University of New Hampshire and her MS in Physician Assistant Studies from the University of Alabama at Birmingham Surgical Physician Assistant Program. She subsequently attained an MBA from Quinnipiac University.

Samrah Mansoor, MD, FAAFP, FCUCM is also recognized for earning the distinction of Fellow. For over ten years, Dr. Mansoor has served as the Medical and Lab Director for AFC Urgent Care in Wichita, KS. With over 25 years of experience in clinical practice and clinical administration, she has served in multiple roles including as a hospitalist for Cox Health and Citizens Memorial Hospital in Missouri. She's been recognized for numerous awards including the 417 Best Doctors Award, AFC Physician of the Year and the AFC President's Award. Dr. Mansoor is committed to medical education, including supervising medical and physician assistant students from institutions including Wichita State University and Missouri State University. As a result, Dr. Mansoor was recognized by the Association of Pakistani Physicians of North America with a 2023 Teaching Award. In addition to her many responsibilities, she is developing a Medical Director 101 Training Program for AFC Urgent Care. Dr. Mansoor is a 1997 graduate of the Fatima Jinnah Medical College in Labore, Pakistan.

Becoming a Fellow is open to physicians, PAs and NPs involved in Urgent Care medicine. Click here for more information.

And the 2025 Annual Awards Go To....

Kevin Reiter, MD was recognized as the *2025 Sean McNeeley, MD, FCUCM Advancing the Specialty* awardee. Dr. Reiter is the Deputy Medical Director at Northwell Health GoHealth Urgent Care and an Assistant Professor at the Zucker School of Medicine Hofstra/Northwell. He has been practicing Urgent Care medicine for 25 years in various roles and settings. Among his work, he was the first to plan and incorporate a virtual visit platform during the pandemic to expand the reach of UC services to thousands of patients who were fearful of in center visits. The program is still being utilized and has since benefited thousands of patients. He has worked with a multidisciplinary team to create a credentialing and educational pathway to train physicians to take X-rays. He has created partnerships with X-ray schools to provide job exposure in the Urgent Care setting and to provide a potential hiring platform. Dr. Reiter is active in collaborating with his organization's health system to ensure clinical quality, ongoing educational opportunities and patient safety.

2025 Sean M. McNeeley, MD, FCUCM Advancing the Specialty Award was first awarded in Spring 2022 to Dr. McNeeley. This award is presented to a College of Urgent Care Medicine member with five or more years in Urgent Care or emergency medicine who has made significant and sustained contributions to advancing the specialty of Urgent Care medicine.

Lindsey E. Fish, MD was recognized as the 2025 *Joseph Toscano, MD, FCUCM Inspiring Excellence* awardee. Dr. Fish is the Medical Director of Denver Health's Peña Urgent Care Clinic in Denver, CO. Additionally, she is an Associate Professor of Medicine at the University of Colorado School of Medicine. Dr. Fish has been working tirelessly to advance research in Urgent Care medicine. With limited funding and a relentlessly positive attitude, her commitment to organizing, conducting and authoring/ co-authoring UC research is unparalleled over the past four years. She continues to provide direct patient care approximately 20 hours per week. In her Medical Director role, she is responsible for clinician supervision, clinic operations, nursing/support staff leadership supervision and collaboration with the greater organization. Additionally, Dr. Fish collaborates organizationally on other important Urgent Care topics to improve quality of care including antimicrobial stewardship, positive opioid prescriptive policies, value-based care and addressing/minimizing health disparities. Dr. Fish was also just announced as the new Editor-in-Chief of the Journal of Urgent Care Medicine.

First awarded Spring 2023 to Dr. Toscano, this award is presented to a College of Urgent Care Medicine member with five or more years of medical experience in Urgent or emergency medicine who has made significant and sustained contributions to the industry by inspiring excellence.

Laurel Stoimenoff, PT (ret.) was the recipient of the College's newest eponymous award, *The Laurel Stoimenoff Impact Award*. Laurel has served in numerous roles with UCA and the Colleges, most recently as administrative support to CUCM and UCCOP. Laurel has coordinated the activities and collaborated with the Boards and Committees. She has worked to support clinical research, establish baseline competencies for clinicians, expand our community to include other professional societies and associations and secure a seat at the table with the Specialty Service Society of the AMA—a key step required for specialty recognition. As Laurel relinquishes some of her responsibilities in her retirement, she is committed to continuing to support some of the clinical initiatives already in the works. Laurel frequently quotes the John Grisham line, "No one leaves the firm," so she won't disappear completely but rewire a bit versus retire.

Welcome Samantha Wulff

And finally, with Laurel's transition, we would like to recognize **Samantha Wulff** who will be assuming many of the things Laurel has had on her plate. Samantha (Sam) is the newly appointed Affiliate Administrator—supporting and coordinating synergies between the Colleges and the Urgent Care Foundation. Sam has a background in public relations, marketing and journalism. She joined UCA as its Communications Director. Before UCA, she had been an agency account executive, a brand manager and a marketing manager for organizations around Buffalo, NY. She has a passion for writing and storytelling, which led her to author a children's book in 2021. Welcome Sam. We all agree–she's going to be great!

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COLLEGE OF URGENT CARE MEDICINE

URGENT CARE COLLEGE OF PHYSICIANS

A publication of the Urgent Care College of Physicians in collaboration with the College of Urgent Care Medicine.

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From the President of the College

Cesar Mora Jaramillo, MD, FCUCM

As we are approaching the fall season, I keep thinking about the work Urgent Care centers do on a regular day and how busy we get over the fall/winter. **With over 200 million Urgent Care patient encounters each year and 90% of the U.S. population living within a 30-minute drive of a center, Urgent Care is uniquely positioned to provide access and improve the outcome of our communities while decreasing healthcare costs.**

Last week was one of those days that reminded me why Urgent Care centers are so pivotal nowadays. Within a couple of hours, we'd already seen a few toddlers with a high fever (late summer Covid-19 wave) and worried parents, a work related injury with a deep laceration and a young woman who thought she was having an allergic reaction but was actually in early anaphylaxis, a few patients with vague symptoms and, of course, the walk in chest pain patient. Our team managed stabilization, suturing, a rapid workup and coordination of care, all without sending a single one to the emergency department.

This is what Urgent Care is capable of at its best - full scope, efficient care, quality of care and accessibility to our communities. And yet, there are UCCs that do not suture or do not have X-rays on sites or provide limited services.

Urgent Care has matured into a critical component of the healthcare system, reducing emergency department overcrowding and providing cost-effective, timely care. Yet for all the progress we've made, there's one area where we must significantly level up if we want to secure our place as a recognized, respected specialty: **avoid scope degradation**.

But how do we avoid scope degradation in our field? What can we do?

Data is proof of our value in the health ecosystem. With the right metrics, we can demonstrate our impact on patient access, outcomes, population health and healthcare costs - these are among a few reasons why data is so important. Furthermore, we can track throughput times, revisit rates, antibiotic stewardship and patient satisfaction, not just to meet compliance requirements but to actively improve care.

Having Urgent Care specific benchmarks ensures we're compared fairly to other care settings. Without them, we risk being measured against hospital emergency departments or primary care offices environments with different patient acuity, resources and workflows.

With data, we can define standards that reflect our real-world practice and allow us to showcase excellence with accuracy while we prevent scope degradation. We cannot improve what we do not measure!

Over the past few years, I've watched small pieces of our scope chip away, sometimes because health systems assume certain procedures "should" only be done in the ED, sometimes because Urgent Care is labeled as "just colds and sore throats."

The truth is, unless we show them exactly what we are capable of doing, with real numbers and real outcomes, these misconceptions can quietly rewrite our job description.

Without that proof, it's far too easy for someone else to define Urgent Care in a way that minimizes our capabilities and full impact in healthcare.

How about research? What is the role of research in our field?

Research is so essential in specialty recognition, and it is the fuel that moves us forward. High-quality research in Urgent Care is still relatively sparse, which means our story is often told by others and sometimes inaccurately. We need rigorous studies that address Urgent Care's unique patient population, care delivery models and operational challenges. Research can help answer critical questions and elevate our field.

When Urgent Care research is published, it strengthens our credibility, informs our practice guidelines and positions us as leaders in evidence-based acute care or it helps us to improve our delivery models and make an impact in our communities.

Specialty recognition, scope-of-practice protection, quality improvement and even payer negotiations all rest on a foundation of credible data and research. Without this, we leave ourselves vulnerable to being defined and potentially limited by external stakeholders.

Urgent Care is more than a convenience; it is an essential, high-quality and evidence-driven care model. Let's make sure we can prove it with the data and research. UCCOP is now the entity for clinical research in our field. Let's become more involved and collaborate in obtaining and sharing valuable data to enhance research in Urgent Care!

From the Editor in Chief

No One Should Have to Choose Between a Bathroom Break and Lunch

Tracey Quail Davidoff, MD, FCUCM
Editor-in-Chief

On a busy work day, not too long ago, when I was single covered due to staffing shortages, somewhere around 3 p.m. I realized I had not used the bathroom (I had to go!) and I'd not had lunch. Looking at the clock and the exploding tracking board, I decided I had time for only one "luxury." So I ignored my grumbling stomach.

In Urgent Care, we pride ourselves on being fast, flexible and fiercely committed to our patients (with the lowest possible throughput time). But somewhere along the line, we've normalized a culture where skipping meals and delaying bathroom breaks is seen as dedication, not dysfunction.

Let's be clear: No clinician should have to choose between a bathroom break and lunch. Yet many of us do, every shift. We push through hunger, dehydration and exhaustion because the waiting room is full, the staffing is thin and the clock never stops. We have unconsciously, or in some cases consciously, decided that productivity is paramount to our basic human needs.

This isn't sustainable. It's not heroic. It's harmful.

Burnout does not always announce itself with a breakdown. Sometimes it creeps in quietly, through skipped meals, missed moments of rest and the slow erosion of our own well-being. And when we are running on empty, patient care suffers too. We make more mistakes. We lose empathy. We start to dread the work we once loved.

The problem isn't lack of resilience. Urgent Care clinicians are some of the most adaptable, driven professionals in medicine. The problem is a system that treats basic human needs as negotiable. When the expectation is to power through a 12 or more-hour shift without time to eat or use the restroom, we're not just failing our clinicians, we are setting them up to fail.

That said, there are small but meaningful steps clinicians can take to protect their time and energy. Prioritizing tasks using quick triage tools, setting micro-goals for breaks and communicating proactively to teammates about coverage can help carve out moments for self-care. Even five-minute pauses taken intentionally may make a difference. Time management won't solve systemic issues, but it can help clinicians reclaim a sense of control in an often-chaotic environment.

It doesn't have to be this way. Protecting time for breaks, ensuring adequate staffing and fostering a culture that values clinician wellness are not luxuries, they're necessities. Leadership must take responsibility for creating environments where clinicians can care for themselves without guilt or fear of judgement.

Because if we want to keep showing up for our patients, we have to start showing up for ourselves. And that starts with something as simple and as essential as the right to eat lunch and use the bathroom.

So what happened to me that day? My next patient, who had waited 90 minutes with a sick kid with the flu, heard my grumbling stomach and actually stopped me and asked if I had had lunch. When she learned I had not, she told me that they would be willing to wait, their concerns were not that important and that I should go eat. I couldn't believe it. And I ate lunch, after I discharged them.

If you are experiencing a loss of job satisfaction, symptoms of imposter syndrome, compassion fatigue or other signs of burnout, help does exist. Most employers will provide access to employee assistance programs that are confidential and free of charge.

As an initiative of the Burnout Task Force developed during the Clinical Advisory Group in 2024, The College of Urgent Care Medicine and Urgent Care College of Physicians are partnering with Better Together to provide professional coaching programs to help us better understand and treat these symptoms of burnout. This program began September 1 and it is a free program for College members. Check it out now at the link below and take the first step to your future well-being - register!

Tracey Davidoff, MD, FCUCM, Editor-in-Chief

For more information: https://bettertogetherphysiciancoaching.com/

To register: https://redcap.ucdenver.edu/surveys/?s=NHWRFMNRPKP8FLX9

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Tracey Davidoff has disclosed a relationship as an advisory board member for AstraZeneca and Pfizer.

Martha Williams has disclosed a relationship as a clinical educator for Binx.

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All other speakers, reviewers, planners, and authors have no relevant financial information to disclose.

Presented by the College of Urgent Care Medicine

September marks two vital public health observances: Sexual Health Awareness Month and Sepsis Awareness Month. As Urgent Care clinicians, we are uniquely positioned to identify, educate and intervene early in both domains—often during brief but pivotal patient encounters.

Sexual Health Is Health

Sexual health is more than the absence of disease—it's about autonomy, access and dignity. The CDC emphasizes routine screening for sexually transmitted infections (STIs), especially Chlamydia and Gonorrhea in sexually active individuals under 25 and offers a Guide to Taking a Sexual History to help clinicians navigate sensitive conversations. The American College of Obstetricians and Gynecologists (ACOG) also provides patient-friendly resources on Your Sexual Health to support discussions around desire, arousal and sexual pain.

Small steps you can take:

- Normalize sexual health discussions during routine visits.
- Offer STI screening and expedited partner therapy when appropriate.
- Display inclusive and teen-friendly materials in your clinic space.

Resources for Clinicians:

- CDC Sexual Health Clinical Guidance: [cdc.gov/sti](https://www.cdc.gov/sti/hcp/clinical-guidance/index.html)
- ACOG Patient FAQs: [acog.org/womens-health/faqs/your-sexual-health](https://www.acog.org/womens-health/faqs/your-sexual-health)
- Urology Care Foundation: [urologyhealth.org](https://www.urologyhealth.org)

Sepsis is a medical emergency

Sepsis is a leading cause of death in U.S. hospitals and early recognition in outpatient settings can be lifesaving. The CDC's Get Ahead of Sepsis Toolkit provides communication tools and clinical guidance to help providers recognize symptoms and educate patients. Remember the acronym *TIME*: Temperature, Infection, Mental decline and Extremely ill—signs that should prompt immediate action.

Proactive steps for clinicians:

- Maintain a high index of suspicion for sepsis in patients with infection and abnormal vitals.
- Educate patients on infection prevention and when to seek emergency care.
- Use CDC and Sepsis Alliance materials to reinforce awareness in your clinic.

Resources for Clinicians:

- CDC Sepsis Toolkit: [cdc.gov/sepsis](https://www.cdc.gov/sepsis/php/toolkit/index.html)

- Sepsis Alliance Awareness Materials: [sepsis.org](https://www.sepsis.org/get-involved/sepsis-awareness-month)

- World Sepsis Day: [worldsepsisday.org](https://www.worldsepsisday.org)

Let’s use this month to reaffirm our commitment to whole-person care. Whether it’s a candid conversation about sexual health or swift action in a suspected sepsis case, your vigilance makes a difference.

Warm regards,

The College of Urgent Care Medicine

Improving STI Detection in Urgent Care: The Role of Clinical Exam and Multiplex PCR Testing

By Steven E. Goldberg, MD[1]

Introduction

Sexually transmitted infections (STIs) remain a critical area of concern in Urgent Care settings. Urgent Care clinicians are on the front lines of evaluating patients with genitourinary symptoms, or those seeking screening following a recent exposure. 1 Accurate, timely diagnosis is key to reducing transmission, preventing complications and improving antimicrobial stewardship. Recent advances in molecular diagnostics—particularly multiplex polymerase chain reaction (PCR) testing—offer rapid, sensitive and comprehensive results for many prevalent STIs.2 This article reviews current trends in STI evaluation and diagnostic testing and demonstrates the role of PCR through several case examples.

Self-Collection Fits Within the Spectrum of STI Diagnostic Approaches

The literature has established that self-collected vaginal, pharyngeal and rectal swabs, when used with validated molecular assays, are non-inferior to clinician-obtained samples for detecting a range of STIs and vaginal infections, including gonorrhea, chlamydia, trichomoniasis, bacterial vaginosis and candidiasis.3 For asymptomatic patients seeking screening, especially in resource-constrained or time-limited Urgent Care settings, this method represents a clinically sound and patient-centered alternative. It is also recognized that in symptomatic individuals or those with risk factors suggestive of upper genital tract involvement, clinician-performed pelvic examination and targeted multiplex PCR testing remain essential.4

This article uses example cases to present a contemporary approach to STI evaluation in the Urgent Care setting and demonstrates where evidence supports the use of multiplex PCR testing—whether on patient- or clinician-collected samples, for screening or symptomatic complaints and for lower or upper reproductive tract complaints—to support more precise diagnosis and management of STIs in real-world Urgent Care scenarios. 5 The diagnostic (testing) strategy must remain responsive to symptom presentation, patient history and relevant clinical context. 1

Epidemiology of Common STIs

According to the Centers for Disease Control and Prevention (CDC), there were more than 2.5 million reported cases of chlamydia, gonorrhea and syphilis in the U.S. in 2022. 6 Chlamydia remains the most common notifiable disease, with over 1.6 million cases annually. 6 Gonorrhea cases have surpassed 700,000 per year and syphilis—especially congenital syphilis—is rising at an alarming rate. 6 Mycoplasma genitalium is an emerging pathogen associated with urethritis, cervicitis and pelvic inflammatory disease.7 Detection is often missed without molecular diagnostics, given the difficulty with culturing the organism. 8 Further, antimicrobial resistance is increasingly reported. 9 Trichomonas vaginalis, a protozoan parasite, is the most common curable STI worldwide, with a prevalence that

disproportionately affects women and minorities. 10 Herpes simplex virus (HSV) types 1 and 2 cause lifelong infection, periodic exacerbations and are a leading cause of genital ulcer disease, with frequent asymptomatic shedding. Other underrecognized pathogens, such as Ureaplasma urealyticum and Bacterial Vaginosis (BV)-associated bacteria, also contribute to the clinical differential, particularly when symptoms are non-specific. 11

Natural History of Common STI Pathogens

Understanding the natural history of sexually transmitted pathogens is essential to clinical interpretation and appropriate patient counseling. Neisseria gonorrhoeae, for example, is an obligate intracellular, facultative anaerobic gram-negative diplococcus that preferentially colonizes the cervix in women, but not the vaginal mucosa. 4,12 This localization explains why some patients with vaginal discharge may be experiencing an upper reproductive tract infection despite minimal external findings. Chlamydia trachomatis is another intracellular pathogen that can remain asymptomatic in a host for extended periods, with the potential for silent progression to pelvic inflammatory disease (PID) and infertility. 4,13 Intracellular pathogens may not be detected in samples like urine, that likely do not contain cells. This physiologic consideration also explains the risk of using a urine sample for PCR collection for an STI evaluation (e.g., false negative) in females. Mycoplasma genitalium has a prolonged and often subclinical course, marked by persistent urethritis or cervicitis and increasing macrolide antibiotic resistance. 4,14 Trichomonas vaginalis, a flagellated protozoan, tends to reside in the lower genital tract, often causing frothy discharge and irritation—but may also be asymptomatic. 4,15 Ureaplasma urealyticum is commensal in some individuals but can contribute to urethritis and adverse pregnancy outcomes when pathogenic. 4,16 Finally, HSV types 1 and 2 establish lifelong latency in sensory ganglia, with reactivation leading to recurrent bothersome genital ulcerations.4,16

STI Testing Guidelines

Clinical interpretation of sexually transmitted infections (STIs) should be guided not only by the natural history of pathogens but also by current public health guidelines for diagnostic testing.

Screening Recommendations for Asymptomatic Individuals

According to the CDC's 2021 STI Treatment Guidelines,1,4 routine screening is recommended for asymptomatic individuals in the following cases:

• Chlamydia trachomatis and Neisseria gonorrhoeae: Screening is advised for sexually active women under age 25, older women with risk factors (e.g., new or multiple sex partners), all pregnant women under 25 years of age, pregnant women 25 years of age and older if at increased risk and men who have sex with men (MSM) at sites of contact.

• HIV, Syphilis and Hepatitis B: Screening is recommended in high-risk populations, including individuals with new or multiple sex partners or MSM.

These pathogens are routinely screened due to their high prevalence, public health impact and potential for asymptomatic transmission.

Testing Recommendations for Symptomatic Individuals

For other pathogens, diagnostic testing is generally reserved for individuals with symptoms or relevant clinical findings[1]:

- Herpes Simplex Virus (HSV): The CDC recommends type-specific PCR or culture for HSV only when active lesions are present. Serologic testing may be used in specific contexts but is not recommended for routine screening in asymptomatic individuals.
- Mycoplasma genitalium: Testing is recommended only in patients with persistent or recurrent urethritis, cervicitis, or pelvic inflammatory disease. Routine screening or extragenital testing for asymptomatic M. genitalium infection is not recommended.
- Trichomonas vaginalis: Testing is advised primarily in symptomatic women and high-risk groups, including HIV-positive women. Routine screening of asymptomatic men or women is not broadly recommended.

Medical and Sexual History: Informing the Scope of STI Testing

Thorough documentation of a patient's past medical and sexual history is fundamental in Urgent Care STI evaluation. Ask questions in a positive way, affirming that sexual activity is a normal part of human behavior. Be non-judgmental and affirming. This will help you attain a better history. A history of prior STIs, sexual practices (including anal, vaginal and oral intercourse), number of partners, use of barrier protection and recent symptoms can influence the choice and breadth of diagnostic tests.17 The CDC STI Treatment Guidelines recommend risk-based screening strategies that consider sexual orientation, gender identity and history of past infections.1 Additionally, sexual history can uncover patterns of recurrent or resistant infections and guide the clinician to include less commonly tested pathogens such as Mycoplasma genitalium or HSV. Tailoring the testing panel based on history ensures both clinical accuracy and cost-effectiveness. 18

The Importance of Pelvic Examination in STI Evaluation and in Diagnosing PID

A pelvic exam is a critical component of STI assessment in women, providing visual and tactile insights that laboratory testing alone cannot offer.19 During the examination, clinicians can assess for cervical motion tenderness, mucopurulent discharge, adnexal tenderness and evidence of ulcerations or lesions—all of which are relevant for diagnosing pelvic inflammatory disease (PID) or cervicitis.4 Research support the diagnostic value of pelvic exams in guiding testing and treatment decisions, especially when symptoms are nonspecific.20-22 Clinical findings from pelvic exams influenced not only testing decisions but also patient education and follow-up care. 20-22 While vaginal discharge is often the presenting symptom in STI-related visits, it can be misleading in isolation. Clinicians must maintain a high index of suspicion for pelvic inflammatory disease (PID) in women presenting with discharge, even if abdominal or systemic symptoms are absent.23 A pelvic exam enables the detection of cervical motion tenderness and adnexal tenderness—which are hallmarks of PID.4 The exam's value extends beyond surface inspection, aiding in early detection and prevention of long-term sequelae such as infertility and chronic pelvic pain.24

Why PCR Testing Matters – with Caveats

Multiplex PCR testing allows for the simultaneous detection of multiple pathogens from a single swab.25 Compared to traditional methods, such as wet mounts, cultures, or antigen-based tests, PCR offers superior sensitivity and specificity. 26 Culture may miss gonorrhea or take 48–72 hours to yield results. Wet preparation for Trichomonas is operator-dependent and has poor sensitivity (<60%).4 specify that HSV PCR—or culture—should only be used to confirm diagnosis from lesions and not for routine screening of asymptomatic individuals. 1 Screening of asymptomatic M. genitalium infection among women and men or extragenital testing for M. genitalium is not recommended.4 Antigen tests for HSV are limited by timing and sample collection requirements. PCR overcomes these limitations by directly detecting microbial DNA or RNA, enabling same-day or next-morning results, even for asymptomatic carriers. 27

The following case examples serve to demonstrate the integration of PCR testing with clinical examination for several common STI-related chief complaints in Urgent Care settings.

Case 1: Asymptomatic Screening Request

A 24-year-old woman presents to Urgent Care requesting STI screening before beginning a new relationship. She denies symptoms and has no known exposures. A clinician may be tempted to test "everything", including:

- Chlamydia, Gonorrhea and Trichomonas vaginalis
- Mycoplasma genitalium
- Ureaplasma urealyticum
- Herpes simplex virus

The CDC recommends testing for only Chlamydia and Gonorrhea in asymptomatic patients, except in high-risk groups. Mycoplasma, Ureaplasma and Trichomonas should only be tested in symptomatic patients and those at high risk. Herpes simplex testing should only be done if an active lesion is identified on exam. (6)

Case 2: Vaginal Discharge with Unknown Etiology

A 32-year-old woman presents with three days of vaginal discharge and irritation. She is sexually active with one partner. The differential includes Bacterial Vaginosis (BV), Trichomoniasis, Gonorrhea and Chlamydia. Traditional evaluation may involve:

- pH testing
- Amine (whiff) test
- Wet mount microscopy

However, these methods are subjective and often miss coinfections. A multiplex PCR panel delivers objective identification of pathogens while co-detecting BV-associated bacteria if present.30 Next-day results enable timely treatment, reduce overtreatment and support improved partner notification and management.

Case 3: Concurrent Urinary Tract and Gynecologic Infection Symptoms

A 38-year-old woman presents with dysuria, urgency and vaginal discharge. She is unsure whether her symptoms are urologic or gynecologic in origin.31 Traditional urine dipsticks and microscopy may detect pyuria, but they cannot differentiate between infectious etiologies. Multiplex PCR testing from a vaginal swab identifies both uropathogens and STIs, facilitating targeted treatment. For example, let's suggest that Mycoplasma genitalium and E. coli were both detected. PCR could guide the use of dual therapy and support a decision to avoid unnecessary empirical antibiotics that may contribute to greater resistance.

Case 4: A male with urethritis symptoms 32

A 29-year-old male presents with penile discharge and dysuria. He denies recent travel and has had two sexual partners in the past six months. Urethritis in males may result from Gonorrhea, Chlamydia, Mycoplasma genitalium, or Trichomonas vaginalis. Empiric treatment often covers only gonorrhea and chlamydia. If multiplex PCR testing confirmed Mycoplasma genitalium—this could allow selection of a single agent, such as moxifloxacin, which would not have been chosen empirically.

Conclusions

Multiplex PCR testing—whether deployed at the point of care or via next-day turnaround—can reshape best practices in Urgent Care STI management. By enabling high-sensitivity screening for asymptomatic individuals and rapid, organism-specific diagnosis in symptomatic patients, PCR enhances both diagnostic precision and timeliness. This facilitates more targeted, supports antibiotic stewardship and meaningfully contributes to national efforts to curb the US STI epidemic.25 When integrated with focused history-taking and appropriate clinical examination (including pelvic examination when indicated), multiplex PCR empowers Urgent Care clinicians to deliver evidence-based, patient-centered care with greater confidence and efficiency.

Table 1. Comparison of STI Testing Methods — Sensitivity, Specificity, Turnaround Time.

Method	Sensitivity	Specificity	Turnaround Time
Wet Mount (Trichomonas)	<60%	High	Immediate
Culture (Gonorrhea)	70–85%	High	48–72 hours
Antigen Testing (HSV)	Varies	Varies	24–48 hours
Multiplex PCR	>95%	>95%	Same-day or next-morning

Comparison of STI Testing Methods — Sensitivity, Specificity, Turnaround Time.

This table summarizes key performance characteristics of traditional and molecular methods. Adapted from CDC and Clinical Microbiology Reviews.30

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Best Practice Summary of the College of Urgent Care Medicine and the Urgent Care College of Physicians

Recommendations for Sample Collection for Gynecologic Infections in Women

Date Reviewed August 8, 2025

Subject

Recommendations for sample collection for gynecologic infections in women

Patient Population

Adult female patients

Rationale

Guidance is needed for clinicians who evaluate patients with gynecologic infections regarding physical examination and sample collection. Due to newer technology and recent evidence, samples may now be collected by the patient in some clinical settings. This best practice summary provides guidance on when patient collected samples or “self-swabs” are appropriate, and when a pelvic exam with clinician collected swabs is warranted.

Introduction

With recent advances in laboratory science, allowing patients to collect their own samples in the evaluation of gynecologic infections is now possible. In many cases, this is more comfortable for the patient and saves valuable time for the Urgent Care clinician, as well as eliminating the need for sensitive examinations in all patients. However, this practice may not be appropriate in all settings. We reviewed the literature from a wide berth of specialties to determine when self-collected swabs may be appropriate, and when a traditional pelvic examination with clinician collected swabs should be undertaken.

Evidence based guidelines

Miller JM, Binnicker MJ, Campbell S, et. al. Guide to Utilization of the Microbiology Laboratory for Diagnosis of Infectious Diseases: 2024 Update by the Infectious Diseases Society of America (IDSA) and the American Society for Microbiology (ASM). Clin Infect Dis. 2024;:ciae104.doi:10.1093/cid/ciae104.

ACOG Committee Opinion No. 754 Summary: The Utility of and Indications for Routine Pelvic Examination. Obstet Gynecol. 2018 Oct;132(4):1080-1083. doi: 10.1097/AOG.0000000000002896. PMID: 30247359.

Discussion

The results of patient-collected vaginal self-swabs for vaginal infections, including gonorrhea, chlamydia, bacterial vaginosis, candida and trichomonas vaginalis are non-inferior to samples collected by clinicians when the patient is instructed on the proper method of collection. This has been clinically validated by numerous studies. (Krause, Paladine, Khan, Schaffer) Clinicians should consider these results clinically equivalent to clinician obtained samples.

Self-collected vaginal swabs may be used for screening for sexually transmitted infections in asymptomatic women if the patient prefers this type of testing over a traditional clinician obtained sample, also called a high-vaginal swab. This practice enhances patient autonomy and may reduce patient stress. Shared decision making should be used when deciding how samples are to be collected in asymptomatic patients. All patients should be offered a pelvic examination. This practice is supported by the CDC for gonorrhea and chlamydia screening. (Workowski)

The Infectious Diseases Society of America and the American Society for Microbiology support the use of self-collected vaginal swabs when used with validated molecular assays for the diagnosis of uncomplicated bacterial vaginosis, vulvovaginal candidiasis and trichomoniasis, highlighting their comparable accuracy to clinician-collected samples. (Miller) The CDC supports this practice only if the assay used to perform the test has been validated for self-collected samples. (Workowski)

The American College of Obstetrics and Gynecology states that pelvic examinations should be conducted when indicated by medical history or symptoms. (ACOG)

Self-collected samples should be avoided in patients who are symptomatic of a pelvic complaint, especially in the following circumstances:

- Treatment failure following a self-collected sample
- Recurrent episodes (>4 times per year)
- Severe symptoms
- Following gynecologic surgery including termination of pregnancy
- Pregnancy or postnatal patients
- Symptoms not characteristic of BV or candidiasis
- Vaginitis without discharge
- When abdominal or pelvic pain is present (suspected pelvic inflammatory disease)
- When there is a suspicion of a retained foreign body
- Inconclusive self-swab results

These patients should have a pelvic examination and clinician obtained samples as indicated. (ACOG, Barnes)

Failure to complete an examination in any patient may result in missed diagnosis if visual inspection of the external and internal genitalia is not performed. Examples include but are not limited to herpes simplex, retained foreign body, carcinoma and pelvic inflammatory disease.

Exceptions may be made if the patient refuses examination or if examination is not clinically feasible (e.g. modesty concerns, clinic lacks resources for pelvic exam, etc.) (Khan)

The patient should be informed of the risks vs. benefits of a pelvic examination and clinician obtained samples, and shared decision making should be used. This discussion should be clearly documented in the medical record, especially if the patient refuses the examination in lieu of self-collected samples.

Patients who refuse a pelvic examination should not be refused testing and treatment. Self-collected samples may be used. (Khan) This should be clearly documented in the medical record.

Summary

1. The results of patient collected vaginal swabs for gonorrhea, chlamydia, trichomonas, bacterial vaginosis and candida are clinically non-inferior to clinician obtained swabs during a pelvic examination. The patient should receive adequate education in how to obtain the swabs correctly.
2. Self-collected vaginal swabs may be obtained in asymptomatic women desiring screening for sexually transmitted infections. Clinician obtained swabs may be performed if desired by the patient.
3. Self-collected vaginal swabs may be obtained in women presenting with presentation consistent with uncomplicated vaginal candidiasis, bacterial vaginosis and trichomonas infections, however patients should be offered a pelvic exam and clinician obtained swabs.
4. Self-collected vaginal swabs should not be used in patients who are symptomatic as outlined above or have a complicated presentation, unless completing a pelvic exam is not possible or refused by the patient. Shared decision making should be performed and well documented in the medical record.

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Reviewers

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Attachments (flow charts, graphics, tables, etc.)

Consult the package insert for directions on obtaining samples as different platforms may have different requirements.

It is recommended that staff members are adequately trained to coach patients on the instructions for obtaining samples. Posters or hand-outs with full instructions recommended.

Evaluation and Management Coding of Emergency Room Transfers

By Stephanie Mercer, PA-C, FCUCM

In the Urgent Care setting, patient transfers to the emergency department for a higher level of care are expected and can be rather common. Higher acuity patients attempt care in the outpatient setting to avoid higher copays and longer wait times associated with the ER. It can be a moral dilemma when choosing the E/M code for these patients. You feel as though you "did nothing," but it was your expertise and medical knowledge that identified the severity of the complaint and the need for a higher level of care. These visits are frequently considered higher complexity, and we should bill accordingly. Let's first review the Medical Decision-Making Table first.

There are three main elements of the MDM table: problem(s), data and management. These are categorized by complexity: straight-forward, low, moderate and high. Knowing how to use this table is imperative to choosing the correct code. Complexity is based on the risk the medical condition has on the patient's morbidity and mortality. The complexity level must qualify for two out of the three elements to choose that specific E/M level. Now, let's examine a case.

Here's a common Urgent Care scenario: A 65-year-old male presents to your clinic with a complaint of chest pain for the last several hours. This patient has a history of hypertension and hyperlipidemia. He describes the pain as pressure without radiation. He denies all other symptoms. The patient is obese, and vital signs show a blood pressure of 170/90. The remainder of the physical exam is otherwise unremarkable. An ECG is ordered and shows normal sinus rhythm without any acute findings. What do you do next?

As Urgent Care providers, we should constantly be forming a differential diagnosis and whether we can rule out the most serious and life-threatening issues with the tools we have available. In this case, at the top of our differential should be myocardial ischemia/infarction. Can we rule this out here? Unless your office has real-time troponins, the answer is likely no. Of course, there are other life-threatening diagnoses to consider as well.

The decision was made to send this patient to a nearby emergency department. An ambulance arrives to transfer the patient. The whole visit took 15 minutes. How do we bill for this? This would be a level 5 visit, and here's why:

As you see on the Medical Decision-Making Chart, an acute illness that poses a threat to life is of high complexity. Since the management has a high risk of morbidity and mortality, you should code appropriately as level 5. The clinician must document the risks factors and differential diagnoses in their MDM to justify the complexity. They can also document the likelihood of hospitalization to explain their decision further.

Table 2 – CPT E/M Office Revisions
Level of Medical Decision Making (MDM)

Revisions effective January 1, 2021:
Note: this content will not be included in the CPT 2020 code set release

Code	Level of MDM (Based on 2 out of 3 Elements of MDM)	Elements of Medical Decision Making: Number and Complexity of Problems Addressed	Elements of Medical Decision Making: Amount and/or Complexity of Data to be Reviewed and Analyzed (*Each unique test, order, or document contributes to the combination of 2 or combination of 3 in Category 1 below.)	Elements of Medical Decision Making: Risk of Complications and/or Morbidity or Mortality of Patient Management
99211	N/A	N/A	N/A	N/A
99202 99212	Straightforward	**Minimal** • 1 self-limited or minor problem	**Minimal or none**	**Minimal risk of morbidity from additional diagnostic testing or treatment**
99203 99213	Low	**Low** • 2 or more self-limited or minor problems; or • 1 stable chronic illness; or • 1 acute, uncomplicated illness or injury	**Limited** *(Must meet the requirements of at least 1 of the 2 categories)* **Category 1: Tests and documents** • **Any combination of 2 from the following:** ◦ Review of prior external note(s) from each unique source*; ◦ review of the result(s) of each unique test*; ◦ ordering of each unique test* **or** **Category 2: Assessment requiring an independent historian(s)** *(For the categories of independent interpretation of tests and discussion of management or test interpretation, see moderate or high)*	**Low risk of morbidity from additional diagnostic testing or treatment**
99204 99214	Moderate	**Moderate** • 1 or more chronic illnesses with exacerbation, progression, or side effects of treatment; or • 2 or more stable chronic illnesses; or • 1 undiagnosed new problem with uncertain prognosis; or • 1 acute illness with systemic symptoms; or • 1 acute complicated injury	**Moderate** *(Must meet the requirements of at least 1 out of 3 categories)* **Category 1: Tests, documents, or independent historian(s)** • **Any combination of 3 from the following:** ◦ Review of prior external note(s) from each unique source*; ◦ Review of the result(s) of each unique test*; ◦ Ordering of each unique test*; ◦ Assessment requiring an independent historian(s) **or** **Category 2: Independent interpretation of tests** • Independent interpretation of a test performed by another physician/other qualified health care professional (not separately reported); **or** **Category 3: Discussion of management or test interpretation** • Discussion of management or test interpretation with external physician/other qualified health care professional\appropriate source (not separately reported)	**Moderate risk of morbidity from additional diagnostic testing or treatment** *Examples only:* • Prescription drug management • Decision regarding minor surgery with identified patient or procedure risk factors • Decision regarding elective major surgery without identified patient or procedure risk factors • Diagnosis or treatment significantly limited by social determinants of health
99205 99215	High	**High** • 1 or more chronic illnesses with severe exacerbation, progression, or side effects of treatment; or • 1 acute or chronic illness or injury that poses a threat to life or bodily function	**Extensive** *(Must meet the requirements of at least 2 out of 3 categories)* **Category 1: Tests, documents, or independent historian(s)** • **Any combination of 3 from the following:** ◦ Review of prior external note(s) from each unique source*; ◦ Review of the result(s) of each unique test*; ◦ Ordering of each unique test*; ◦ Assessment requiring an independent historian(s) **or** **Category 2: Independent interpretation of tests** • **Independent interpretation of a test performed by another physician/other qualified health care professional (not separately reported);** **or** **Category 3: Discussion of management or test interpretation** • Discussion of management or test interpretation with external physician/other qualified health care professional/appropriate source (not separately reported)	**High risk of morbidity from additional diagnostic testing or treatment** *Examples only:* • Drug therapy requiring intensive monitoring for toxicity • Decision regarding elective major surgery with identified patient or procedure risk factors • Decision regarding emergency major surgery • Decision regarding hospitalization • Decision not to resuscitate or to de-escalate care because of poor prognosis

Here's an example of how the above scenario should be reflected in the MDM section of your documentation: "Patient is a 65 y/o male with chest pain who has multiple risk factors for cardiac disease, including advanced age, hypertension, hyperlipidemia and obesity. Although the ECG did not show any acute findings based on my interpretation, the risks remain high and the patient will need a further hospital-based workup. My working diagnosis is Acute Coronary Syndrome. Patient was sent to the ER by ambulance given the life-threatening nature of the differential." You should provide a differential list here.

Not all transfers to the emergency room are considered level 5 cases. Sometimes in Urgent Care, we are obligated to send patients to the ER for resources we lack. This can include urgent specialist evaluation, advanced imaging, prolonged patient monitoring and STAT laboratory results.

Here's another scenario: A 26-year-old female presents to the office with abdominal pain. The patient endorses several episodes of vomiting and watery, non-bloody diarrhea, which began 5 hours before her arrival. The vital signs are unremarkable. The patient's exam reveals diffuse abdominal tenderness, but it is greatest in the right lower quadrant. The patient's urinalysis and urine pregnancy test are both negative. While your suspicion is high for a viral cause, you decide to send the patient to the emergency room for further diagnostic testing.

A diagnosis of “Right lower quadrant abdominal pain” is added as the primary assessment, which justifies the moderately complex term “undiagnosed problem with uncertain prognosis”. This is a moderate level 4 problem type. The management is considered moderate risk with an urgent referral to the emergency room for workup, but there is no current threat to life or bodily function. This visit would be a level 4. Remember, any undiagnosed problem should have a differential diagnosis listed in the MDM section of the chart to explain the increased risk.

While clinical judgement in the above examples will vary, your expert documentation must explain the treatment plan you felt was best and any risk concerns you had for your patient.

Clinicians who work in the Urgent Care setting have a special set of skills that allow them to recognize high risk patients in a fast-paced environment. You deserve to get credit for these skills and the knowledge you worked tirelessly to obtain.

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Recognizing and Managing Conjunctivitis-Otitis Syndrome in the Urgent Care Setting

By Alicia V. Tezel, MD from Little Spurs Pediatric Urgent Care

Conjunctivitis-otitis syndrome refers to the simultaneous occurrence of purulent conjunctivitis and acute otitis media. This is a common pediatric condition seen in Urgent Care centers. This article reviews the etiology, clinical features and management of this condition with a focus on actionable guidance for general Urgent Care settings.

Introduction

Urgent Care clinicians frequently encounter pediatric patients with either acute otitis media (AOM) or conjunctivitis. Less frequently, the two appear together in a well-described but under-recognized condition known as *conjunctivitis-otitis syndrome*. Awareness of this syndrome is critical to ensure appropriate diagnosis and treatment, especially since management differs from isolated eye or ear infections

The role of *Haemophilus influenzae* in acute otitis media (AOM) and purulent conjunctivitis was first recognized by Coffey nearly 40 years ago. Some years later, Bodor coined the term “conjunctivitis-otitis syndrome” and reported that *H. influenzae* was present in the conjunctival exudate in approximately 80% of cases. [1]

Epidemiology and Etiology

The antecedent event in almost all cases of acute otitis media is a symptomatic viral upper respiratory tract infection. Approximately one-third of viral upper respiratory tract infections are complicated by acute otitis media. The median time between the onset of an upper respiratory infection and the development of acute otitis media is approximately four days. Viral infection inflames the mucosa of the upper respiratory tract, including the nasopharynx and eustachian tube. Eustachian tube dysfunction impairs the drainage of fluid from the middle ear and leads to nasopharyngeal aspiration of pathogens.[2]

The most common etiologies of acute otitis media include *Streptococcus pneumoniae*, *Haemophilus influenzae* and *Moraxella catarrhalis.* These are also the predominant pathogens of bacterial conjunctivitis in children.

Since the introduction of the pneumococcal and *H. influenzae* type b vaccines, the nasopharyngeal colonization rate of non-typeable *H. influenzae* (NTHi) has been increasing.

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[1] Bingen, Edouard PhD*; Cohen, Robert MD†‡; Jourenkova, Nadejda MD§; Gehanno, Pierre MD‖. EPIDEMIOLOGIC STUDY OF CONJUNCTIVITIS-OTITIS SYNDROME. The Pediatric Infectious Disease Journal 24(8):p 731-732, August 2005. | DOI: 10.1097/01.inf.0000172939.13159.3b

[2] Shaikh N. Otitis media in young children. *New England Journal of Medicine*. 2025;392(14):1418-1426. doi:10.1056/nejmcp2400531

NTHi is a beta-lactamase–producing organism capable of infecting both the upper respiratory tract and the conjunctival epithelium.[3]

Clinical Presentation

Typical signs and symptoms include:

- **Conjunctivitis**: Purulent eye discharge, conjunctival injection, often bilateral
- **Otitis media**: Ear pain, irritability, possible fever, and middle ear effusion or tympanic membrane inflammation

Importantly, patients may not report symptoms from both sites. Eye complaints might prompt the visit, while the ear infection is discovered on examination—or vice versa. A thorough physical exam is essential.

Diagnosis

Diagnosis is clinical. No specialized testing is required in uncomplicated cases. Clinicians should maintain a high index of suspicion when a child presents with either conjunctivitis or otitis alone, particularly in the presence of bilateral purulent conjunctivitis.

Accurate diagnosis of AOM in infants and young children may be difficult. Symptoms may be mild or overlap with those of an upper respiratory tract illness. The tympanic membrane (TM) may be obscured by cerumen, and subtle changes in the TM may be difficult to discern. Ear pain is useful in diagnosing AOM, but **clinicians should diagnose AOM only when children present with moderate to severe bulging of the TM *or* new onset of otorrhea not due to acute otitis externa. Isolated redness of the TM without bulging is not sufficient for diagnosis**

Otitis media with effusion (OME) is the presence of middle-ear fluid that may occur either as the aftermath of an episode of AOM or due to eustachian tube dysfunction from an upper respiratory tract infection. OME may also precede and predispose to the development of AOM. These two forms of OM may be considered segments of a disease continuum. However, because OME does not represent an acute infectious process that requires antibiotics, it is critical for clinicians to become proficient in distinguishing normal middle ear status from OME or AOM. This will prevent unnecessary antibiotic use, which increases the risk of adverse effects and antimicrobial resistance.[4]

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[3] Hu YL, Lee PI, Hsueh PR, Lu CY, Chang LY, Huang LM, Chang TH, Chen JM. Predominant role of Haemophilus influenzae in the association of conjunctivitis, acute otitis media and acute bacterial paranasal sinusitis in children. Sci Rep. 2021 Jan 8;11(1):11. doi: 10.1038/s41598-020-79680-6. PMID: 33420151; PMCID: PMC7794412.

[4] Lieberthal AS, Carroll AE, Chonmaitree T, et al. The diagnosis and management of Acute Otitis media. *PEDIATRICS*. 2013;131(3):e964-e999. doi:10.1542/peds.2012-3488

Treatment

Treatment differs from isolated conjunctivitis or otitis media:

- **Systemic antibiotics** are preferred to treat both infections simultaneously.
- Given the likelihood of resistant organisms, narrow-spectrum antibiotics like amoxicillin alone may be insufficient as NTHi produces beta lactamase which renders it inactive
- First-line therapy is **Amoxicillin-Clavulanate**, 90 mg/kg/day of the amoxicillin component, divided BID. Amoxicillin 600mg/Clavulanate 42.9mg per 5 ml is the preferred choice. The Clavulanate acts as an irreversible inhibitor of many beta-lactamases therefore restoring the antibacterial activity of amoxicillin against beta-lactamase producing organisms.[5]
- Remind parents to give this with food to reduce the risk of diarrhea.
- Alternative: **Cefdinir** or **cefuroxime** in penicillin-allergic patients (non-anaphylactic)

Topical ophthalmic antibiotics (e.g., polymyxin-trimethoprim drops) **are *not necessary*** if systemic antibiotics are used and are typically avoided unless eye symptoms persist beyond 48 hours.

Disposition and Follow-Up

Most patients can be safely discharged with reassurance and close outpatient follow-up. Red flags warranting referral include:

- Orbital cellulitis
- Intractable ear pain or vomiting
- Immunocompromise state
- Failure to improve within 48–72 hours

Educate caregivers on the expected clinical course: improvement in 24–48 hours, with full resolution over 5–7 days.

Conclusion

Conjunctivitis-otitis syndrome represents a distinct clinical entity requiring tailored management. Urgent Care clinicians can confidently identify and treat this syndrome with a thoughtful exam and targeted antibiotic therapy. Routine eye drops are not required, and recognition of NTHi as the primary culprit should guide treatment decisions. An efficient, informed approach improves outcomes and reduces unnecessary prescriptions or referrals

[5] Geddes AM, Klugman KP, Rolinson GN. Introduction: historical perspective and development of amoxicillin/clavulanate. Int J Antimicrob Agents. 2007 Dec;30 Suppl 2:S109-12. doi: 10.1016/j.ijantimicag.2007.07.015. Epub 2007 Sep 27. PMID: 17900874.

Image Challenge: EKG Abnormality After Syncope

By Tracey Q. Davidoff, MD, FCUCM

A 23 y/o male presents to the Urgent Care following a syncopal episode at work. He has no significant past medical history. His vital signs are normal. You get the following EKG:

Figure 1.

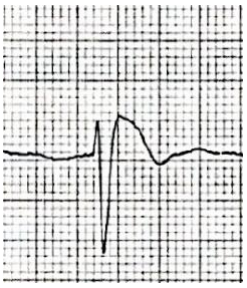
Should you be worried?

Yes! This EKG pattern is classic for Brugada syndrome. **Brugada syndrome** is an inherited cardiac channelopathy characterized by a distinctive electrocardiographic pattern—**coved ST-segment elevation ≥2 mm in at least one of the right precordial leads (V1–V2)** (red arrow), often accompanied by a negative T wave, in the absence of structural heart disease. This ECG pattern may present spontaneously or be unmasked by sodium channel–blocking drugs or fever. The syndrome is associated with an increased risk of ventricular fibrillation and sudden cardiac death, particularly in young to middle-aged males, though it can occur at any age. Clinical presentation ranges from asymptomatic to syncope, nocturnal agonal respiration or aborted sudden cardiac arrest. The American College of Cardiology, the American Heart Association, and the Heart Rhythm Society define Brugada syndrome by these clinical and ECG features and recommend risk stratification and consideration of implantable cardioverter-defibrillator (ICD) therapy in patients with a history of syncope or cardiac arrest due to ventricular arrhythmia, as these individuals are at highest risk for life-threatening events.

When **ECG changes consistent with Brugada syndrome are identified in a patient presenting with syncope**, the patient should be considered at high risk for ventricular arrhythmias and sudden cardiac death. The most important next step is urgent referral to an emergency department or facility with cardiac monitoring and electrophysiology consultation, as these patients may require inpatient monitoring and expedited evaluation for implantable cardioverter-defibrillator (ICD) therapy if the syncope is suspected to be arrhythmic in origin. Ideally EMS should be called, and the patient should not be allowed to drive.

Immediate stabilization, avoidance of fever, as fever can precipitate arrhythmias in Brugada syndrome, and prompt cardiology involvement is advised.

Remember this pattern in V2, if you see it, it is BRUGADA until proven otherwise!



As a side note, remember the EKG machine software is not always correct, and may miss this and other findings. In this instance, the machine reading interpreted this as an acute anterior wall MI. **Always** look at the EKG yourself, and do not rely on machine readings. If there is a discrepancy, phone a friend!

Shen WK, Sheldon RS, Benditt DG, et al. 2017 ACC/AHA/HRS Guideline for the Evaluation and Management of Patients With Syncope: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Rhythm Society. Journal of the American College of Cardiology. 2017;70(5):e39-e110. doi:10.1016/j.jacc.2017.03.003.

Why It Matters to Ask: Identifying Risk Factors for Pregnant and Postpartum Patients in Urgent Care

In conjunction with the American College of Obstetricians and Gynecologists

By Martha Williams, PA-C, UCA/CUCM

It's the first week of January, and respiratory illness season is in full swing, swamping the Urgent Care centers with the post-holiday surge. A 38-year-old female walks into the local Urgent Care complaining of cough and shortness of breath. Triage notes that she had symptoms for the last week that are worsening despite the use of meds. Vitals are all within normal limits except for SpO2 of 94%. The patient is not flagged as emergent. A focused history is obtained by the attending clinician with one key question omitted: has she been pregnant in the last year?

In 2023 the pregnancy-related mortality ratio in the US was 18.7/100,000 live births, which is thankfully improved from the previous modern-day high in 2021 of 33.2. But to put this into perspective, in 1987 that same ratio was 7.2. (CDC, 2025). Why has there been such a stark upward trend despite the advancements in medicine? A current working hypothesis is that there is a lack of recognition of risks that are specific to the pregnant and postpartum population. Within the Urgent Care (UC) realm, there is an inherent duty to recognize those risks since many patients use the UC system as their first step in healthcare.

Some of the leading causes of pregnancy-related deaths include hemorrhage (18.1%), infection/sepsis (15.2%), embolic conditions (11.5%), cardiomyopathy (10.2%), and hypertensive disorders (6.4%), (CDC, 2024), and when comparing racial and ethnic groups, death rates were high in non-Hispanic Black and American Indian/Alaska Natives. In UC settings, early recognition of these conditions is possible and potentially life saving. The American College of Obstetricians and Gynecologists (ACOG) specifically recommends that UC clinicians pay extra attention to the symptoms of shortness of breath, headache, chest pain and edema in this population group and noted that the postpartum period is 12 months long (ACOG, 2024). Common misconceptions in medical education that persists in recognizing that the postpartum period is as short as 6-12 weeks. And many UC clinicians and staff would say that those listed presenting symptoms are quite common in UC clinics around the country. It has been taught to ask about pregnancy, and sometimes breastfeeding, but rarely is it asked if someone has been pregnant in the previous year. It is for these very reasons that the College of Urgent Care Medicine has been working with ACOG to develop a set of algorithms and guidelines to help shift training to include recognizing these risks for pregnant and postpartum patients.

The Identifying and Managing Obstetric Emergencies in Non-obstetric Settings (ACOG, 2025) initiative has included experts from emergency medicine, emergency medical services and UC medicine along with the Centers for Disease Control and Prevention in response to the increase in the pregnancy-related mortality rates, which in 2021 was ten times that of other high income, industrialized countries like Australia, Spain and Japan (ACOG 2024). Two algorithms and two guidelines were created for

Urgent Care medicine: Cardiovascular Disease in Pregnancy and Postpartum Algorithm, Acute Hypertension in Pregnancy and Postpartum Algorithm, Postpartum Hemorrhage Guideline, and Elevated BP in Pregnancy and Up to 6 Weeks Postpartum Guideline. It is also recommended to consider adding signage to clinics and EMR alerts to ask if patients have been pregnant in the preceding 12 months.

Looking back at the initial presentation of the 38-year-old. Would it matter to have asked if she had been pregnant within the last year? For the average young adult woman, cardiomyopathy risk is generally low and often not in the differential; however, if this patient had been asked and she responded in the affirmative, an immediate need for a whole new set of history questions would be triggered as well as the importance of an emergent referral.

The time to recognize UC medicine and clinics as a key prevention tool in pregnancy-related mortality is now. While it is understood that the pregnancy and postpartum condition will be treated outside of Urgent Care, it is the responsibility of UC clinicians to appropriately identify the potential risks and manage patients in the center in addition to referring the appropriate level of care. Working with local OB/GYN offices and hospitals in advance to create a triage plan can help when time is of the essence during an urgent or emergent case. Together, Urgent Care clinicians can save the lives of pregnant and postpartum patients with an awareness of these specific risk factors, while impacting a reduction in the pregnancy-related mortality rate in the U.S.

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American College of Obstetricians and Gynecologists, 2025. Identifying and Managing Obstetric Emergencies in Non-obstetric Settings. https://www.acog.org/programs/obstetric-emergencies-in-nonobstetric-settings#:~:text=Identify%20and%20Respond%20to%20Obstetric%20Emergencies&text=Patients%20who%20develop%20signs%20or,rooms%2C%20or%20urgent%20care%20facilities.

Centers for Disease Control and Prevention, 2025. Pregnancy Mortality Surveillance System. https://www.cdc.gov/maternal-mortality/php/pregnancy-mortality-surveillance-data/

Tick Borne Illness Season – A Few Questions About Lyme Disease

By Cesar Mora Jaramillo, MD, FAAFP, FCUCM

Could that summer rash actually be Lyme disease? As tick activity increases, it's essential to recognize that certain skin lesions may represent more than just a rash—they could be the first sign of Lyme disease.

Let's discuss a brief case and learn more about Lyme Disease!

Case: A 45-year-old woman presents to Urgent Care in Rhode Island 48 hours after removing a tick. She noticed a tick while taking a shower. She describes the tick as being engorged but she thinks it might have been attached for less than 24 hours, although she is unsure. She has difficulty describing the tick but after showing her pictures she thinks it might have been a deer tick.

No significant past medical history. No current medications. She denies symptoms in the past.

She denies fatigue, fever, headache, joint pain or neurologic symptoms, but reports a slowly enlarging erythematous patch on her periumbilical area where the tick was attached. The rash is not painful or itchy.

On exam, vital signs are within normal limits. You notice an oval shaped erythematous patch with questionable central clearing of 4-5cm. Otherwise the rest of the exam is unremarkable.

What is the diagnosis?

A. Early localized disease

B. Early disseminated disease

C. Late disease

D. Tick Bite Hypersensitivity

How about if you find multiple lesions?

A. Early localized disease

B. Early disseminated disease

C. Late disease

D. Tick Bite Hypersensitivity

E. Multiple tick bites

Based on your diagnosis - What is the best next step?

A. Order serologic testing to confirm Lyme disease at this stage

B. Prescribe treatment for Lyme

C. Prescribe Lyme prophylaxis

D. A + B

E. A + C

DISCUSSION

You diagnosed the patient with Erythema Migrans - Early Lyme disease.

Erythema Migrans (EM)

- Early localized phase of Lyme disease may present with an Erythema Migrans rash and low-grade fever. This stage usually occurs within 1 to 28 days following the tick bite.
- EM occurs in approximately 70-80 percent of patients.
- The lesion is typically a single, erythematous, nonpainful, round or oval patch that expands slowly over days to weeks if untreated.
- The majority is uniformly erythematous although central clearing may occur.
- Patients in the early localized stage can also have nonspecific findings similar to a viral syndrome (fatigue, headache, myalgia, arthralgia).
- Single EM lesions may be confused with tick bite hypersensitivity reaction.
- A small redness at the site of a tick bite that occurs immediately and resembles a mosquito bite, is common. This irritation generally goes away in 1-2 days and is not a sign of Lyme disease.
- EM is the primary manifestation of early Lyme disease also called early localized disease. Although some patients who present with early localized disease probably have some degree of dissemination.
- Multiple EM lesions are a sign of early disseminated disease, not multiple tick bites.

- All patients with EM should be treated for Lyme disease. The goal of therapy is to shorten the duration of the signs and symptoms of early disease and to prevent progression to later stages of Lyme disease.
- For nonpregnant patients the recommended treatment is 10-day course of doxycycline rather than one of the other oral agents. Doxycycline has activity against other tick-borne illnesses.
- The American Academy of Pediatrics supports the use of doxycycline for children <8 years of age if it is administered for ≤21 days.
- Second line therapy includes a 14-day course of amoxicillin or cefuroxime.

How about testing?

- Serologic testing is not required in early disease.
- EM lesions often appear prior to development of an immune response, and patients are often seronegative.
- Serologic testing after treatment in early disease is not indicated – patients may not develop antibody response; hence they will have negative titers.
- Serologic testing can be considered if the cause of the skin lesion is in doubt, and empiric antimicrobial therapy is not administered. Testing could be obtained at the time of presentation and repeated in 2 to 3 weeks if negative.
- Monitoring the rash over several days could be considered if in doubt. EM usually expands within 2-3 days if antibiotics are not initiated.

What is the criteria for Lyme prophylaxis?

IDSA/AAN/ACR guidelines recommend prophylactic antibiotic therapy to adults and children within 72 hours of removal of an identified high-risk tick bite.

To be considered high risk, a tick bite must meet all of the following 3 criteria:

- The tick bite was from an identified Ixodes spp. vector species.
- The tick bite occurred in a highly endemic area.
- The tick was attached for ≥36 hours.

If a tick bite cannot be classified with a high level of certainty as a high-risk bite, the guidelines recommend a wait-and-watch approach.

Antibiotic prophylaxis is not recommended for bites that are equivocal risk or low risk.

The recommended regimen for prophylaxis is a single oral dose of doxycycline, 200 mg for adults and 4.4 mg/kg (up to a maximum dose of 200 mg) for children.

Conclusion

This case emphasizes the importance of recognizing Lyme disease early in Urgent Care settings. It is important to notice that for a tick to be engorged, it must have been attached for at least 36-48 hours. Prompt identification of Erythema Migrans and timely initiation of appropriate antibiotic therapy can significantly reduce the risk of complications and long-term sequelae. For clinicians in Urgent Care, maintaining a high level of suspicion is crucial for ensuring accurate diagnosis and effective management of early Lyme disease.

References:

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Antibiotic Stewardship in the Urgent Care Setting- A Measure of Clinical Impact

This poster was displayed at the 2025 Urgent Care Convention in Dallas, TX.

Background

Infectious conditions are among the most common types of diagnoses managed in the Urgent Care setting. Several resources indicate that a higher volume of antibiotic prescriptions and inappropriate antibiotic prescribing were associated with Urgent Care center visits than any other practice setting. Antibiotic Stewardship requires a multilayer effort which includes not only avoiding unnecessary use or overuse but also avoiding antibiotic misuse, such as wrong antibiotic selection, wrong dose, or wrong duration of therapy. To combat inappropriate antibiotic prescribing in hospitals, hospitals have incorporated Antibiotic Stewardship Programs as a standard practice, but these programs are not a common practice in the Urgent Care industry, thereby presenting an industry gap. The incorporation of Quality Improvement Programs into Urgent Care organizations to focus on projects like antibiotic stewardship would certainly serve as an advancement for Urgent Care medicine as a specialty.

Objectives

The objective of the project was to determine if an antibiotic stewardship project would result in a measurable clinical outcome, thereby suggesting that Quality Improvement Programs addressing antibiotic[stewardship be considered common practice in the Urgent Care setting.

Methods

In keeping with any institutional Antibiotic Stewardship Program, American Family Care identified a physician and pharmacist champion for the project. We also ensured these clinical leaders were provided with sufficient time and resources to devote to stewardship to demonstrate commitment to optimizing antibiotic prescribing. The project incorporated several of the CDC's Core Elements of Outpatient Stewardship to include both provider and patient facing education surrounding antibiotic stewardship. As with any quality improvement project, assessment, intervention, tracking, and reporting were essential to improving antibiotic prescribing practices. Data was electronically extracted from the electronic health record (EHR) and included patient reported demographics, past medical history, clinician specialty (MD, DO, NP, PA), International Classification of Diseases Tenth Revision (ICD-10 codes), and the antibiotics prescribed. This data was collected through retrospective chart reviews and evaluated for the following measures: frequency in which treatment for acute, uncomplicated, urinary tract infection treatment was concordant with IDSA guidelines and frequency in which the patient had to be prescribed a second antibiotic. Baseline data was collected for a 6-month timeframe. We then introduced several interventions to include poster sized cognitive aids detailing evidence-based guideline recommended therapy, a learning management system course reviewing diagnosis and treatment of uncomplicated urinary tract infections, and patient education to provide public awareness of the dangers of antibiotic overuse. During the 6-month timeframe in which interventions were in place, we tracked and reported frequency in which UTI treatment was concordant with IDSA guidelines on an individual clinician level. Essentially clinicians were able to see their percentage of UTI treatments prescribed that were IDSA compliant and compare that percentage with that of their peers. We then reviewed 6 months of data with interventions in place, again via retrospective chart reviews looking at the same measures as before the implementation of interventions. Evaluation of measurable outcomes entailed the comparison of baseline data to post intervention data to determine the clinical impact of the antibiotic stewardship project. The specific outcomes that were evaluated were the rate at which treatment was concordant with IDSA guidelines and the frequency at which the patient had to be prescribed a second antibiotic.

Patient and Provider Characteristics for UTI Antibiotic Stewardship Project

Baseline characteristics.

A total of 31,341 patients were included in the study, 15,372 patients for the pre-intervention phase and 15,969 patients for the post-intervention phase. Patient and provider characteristics were similar at baseline.

Inclusion Criteria:
- Female patients between the ages of 18 and 74
- Diagnosis of acute cystitis or urinary tract infection

Exclusion Criteria:
- Females <18 years of age and ≥75 years of age
- Pregnant and breastfeeding females
- Males
- Diagnosis of complicated UTI or pyelonephritis
- Secondary diagnosis requiring antimicrobial therapy
- Chronic Kidney Disease
- Immunocompromised
- Fever or chills indicating possible alternative diagnosis of pyelonephritis or complicated UTI

Variable	Pre-Intervention	Post-Intervention
Patient Characteristics • Mean Age • % Without Medication Allergy	 43.5 62.9%	 43.3 61.6%
Provider Characteristics (%) • Physician provider • Midlevel provider	 24.8% 75.2%	 17.9% 82.1%

The following barriers were anticipated: knowledge gaps regarding up-to-date IDSA clinical practice guidelines, clinician perception of patient expectations for antibiotics, and clinician concern regarding decreased patient satisfaction when antibiotics are not prescribed.

Statistical Methods

To compare the compliance rates in patients before and after the stewardship intervention, a chi-square test of independence was performed. In addition to reporting the counts and percentages for the 2 time periods (pre and post intervention implementation), the odds ratio was also computed to determine the magnitude of change following the intervention. Secondary analyses were performed examining changes at the clinic and provider levels. Wilcoxon signed-rank tests were used to test for changes across time for clinics and providers. Descriptive statistics, including medians, inter-quartile ranges and minimums and maximums, are utilized to describe the compliance rates pre-intervention and post-intervention, as well as the observed changes for clinics and providers. All analyses were performed using R Statistical Software (R version 4.4.2, R: A Language and Environment for Statistical Computing, R Core Team 2024 and RStudio 2024.09.1 Build 394, Posit Software, PBC).

Results

Patient-level:
During the pre-intervention period, 3221 cases out of a total 15372 (21.0%) were compliant with the established guidelines, while for the post-intervention period 9033 (56.6%) cases of 15969 were compliant, X^2=4170.0, p=0.0001. The odds of compliance were 4.9 times greater following the implementation of the intervention (OR=4.913 (95% CI 4.674 - 5.164)).

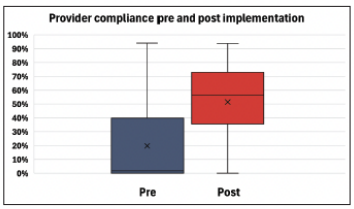
This project not only poses the question of high relevance for Urgent Care medicine, "Should Quality Improvement Programs that address antibiotic stewardship be common practice in the Urgent Care Industry" but also aims to provide public education and awareness to antibiotic resistance which is among the greatest public health threats today per the Centers for Disease Control and Prevention.

In terms of a secondary endpoint, the patients whose treatment was compliant with IDSA guidelines 724/12254 (5.9%) subsequently received a second antibiotic. For those noncompliant, 1005/19087 (5.3%) subsequently received a second antibiotic. This metric called into question the impact that initial prescribing of a broad-spectrum antibiotic (rather than a recommended narrow-spectrum antibiotic) had on the patient subsequently receiving a second antibiotic.

Provider-level:
In order to obtain more reliable measures of compliance, only providers having 10 or more cases in each of the 2 time periods were used in examining provider changes over time. During the pre-intervention period, 264 (74.4%) of the total 355 providers had 10 or more cases. Similarly, during the post-intervention period, 273 (78.7%) of a total of 347 providers had 10 or more cases. A total of 171 providers who had 10 or more cases in both periods were used for the provider-level comparison of changes over time. The number of cases for each provider ranged from 10 to 172 during the pre-intervention period and from 10 to 151 during the intervention phase. For the pre-intervention period, compliance rates ranged from 0% to 94.0%, with median=1.7% (IQR=0.0% - 39.7%). During the post-intervention period, the compliance rates for these providers ranged from 0% to 93.8%, with median=56.2% (IQR=35.4% - 73.0%).

Provider changes in compliance ranged from -59.0% to +91.7%. Note, 16 (9.4%) providers experienced declines in compliance, 14 (8.2%) exhibited no change in compliance (all had compliance rates of 0.0 pre & post), while the other 141 (82.4%) displayed improved compliance. The median change was +32.6% (IQR=8.0% - 51.9%), z=10.12, p=0.0001.

Box Plot - a visual representation of a data set's distribution
1st quartile (Q1, bottom line of box) = 25th percentile (value below which 25% of data points fall when data is arranged in increasing order)
2nd quartile (Q2, middle line in box) = median of a data set (50% of data lies below this point)
3rd quartile (Q3, top line of box) = 75th percentile (75% of data falls below 3rd quartile)
Whiskers = min and max
Dots = outliers
Interquartile Range (IQR) = representing the spread of the middle 50% of data



Pre-intervention period:
- Compliance rates ranged from 0% to 94%
- Median (middle line of box) = 1.7%
- Mean (x) = 19.8%
- 1st quartile (bottom line of box) = 0.0%
- 3rd quartile (top line of box) = 39.7%
- Minimum = 0%
- Maximum = 94%

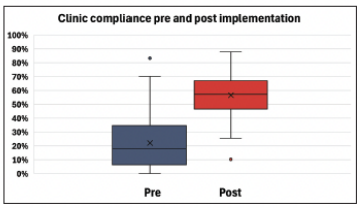
Post-intervention period:
- Compliance rates ranged from 0% to 93.8%
- Median (middle line of box) = 56.2%
- Mean (x) = 51.4%
- 1st quartile (bottom line of box) = 35.4%
- 3rd quartile (top line of box) = 73.0%
- Minimum = 0%
- Maximum = 93.8%

Results

Clinic-level:

During the pre-intervention period, a total of 82 clinics were included. The number of cases within clinics ranged from 10 to 376. For the pre-intervention time period, compliance rates ranged from 0% to 83.2%, with median=17.7% (IQR=6.2% - 34.6%). During the post-intervention period, there were a total of 84 clinics (2 new clinics in addition to the 82 from the pre-intervention phase). This clinic-level analysis only includes the 82 clinics appearing in both time periods. During the post-intervention period, the compliance rates for these clinics ranged from 10.3% to 87.9%, with median=57.1% (IQR=46.4% - 67.0%).

Clinic changes in compliance ranged from -16.2% to +70.3%. Only 2 clinics exhibited a decrease in compliance, these 2 had the highest compliance in the pre-intervention period (i.e., 83.2% & 70.1%). Each of the other 80 clinics displayed improved compliance. The median change was +35.5% (IQR=23.4% - 45.4%), z=7.83, p=0.0001.



Pre-intervention period:
- Compliance rates ranged from 0% to 83.2%.
- Median (middle line of box) = 17.7%
- Mean (x) = 22%
- 1st quartile (bottom line of box) = 6.2%
- 3rd quartile (top line of box) = 34.6%
- Minimum = 0%
- Maximum = 70%
- Outlier = 83.2% compliance

Post-intervention period:
- Compliance rates ranged from 10.3% to 87.9%
- Median (middle line of box) = 57.1%
- Mean (x) = 56.5%
- 1st quartile (bottom line of box) = 46.4%
- 3rd quartile (top line of box) = 67%
- Minimum = 25.5%
- Maximum = 87.9%
- Outlier = 10.3% compliance

Conclusion

The incorporation of an antibiotic stewardship project involving several of the CDC's Core Elements of Outpatient Stewardship among other interventions was found to have a statistically significant measurable clinical outcome, thereby suggesting that Quality Improvement Programs addressing antibiotic stewardship be considered common practice in the Urgent Care setting. The incorporation and standardization of such Programs within the Urgent Care industry would certainly change the landscape of Urgent Care, and while they are customary within the hospital setting, one could argue that until these stewardship initiatives are incorporated into the Urgent Care industry the reach of the CDC's antibiotic stewardship endeavor will be minimal. The inclusion of Quality Improvement Programs addressing antibiotic stewardship would advance Urgent Care medicine, improving the care provided to our patients, and reducing antibiotic resistance across our community and across the country.

Acknowledgements

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Uncovering the Unexpected: A Case of Chronic Cough in an Adolescent with an Unusual Etiology

By Daniel Moscato, MS, PA-C, Joshua W. Russell, MD

This poster was displayed at the 2025 Urgent Care Convention in Dallas, TX.

Introduction

Cough is an exceedingly common pediatric chief complaint in urgent care (UC) settings and is most often attributable to an infectious cause. However, clinicians must refine and alter their differential diagnoses when the cough persists to ensure serious etiologies are diagnosed in a timely fashion.

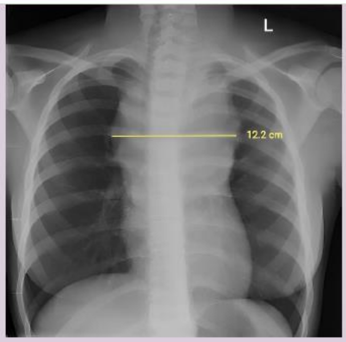
Presentation

A 14-year-old girl presented to UC with cough for 6 weeks. She had multiple presentations to UC for these symptoms over prior weeks; a viral upper respiratory infection (URI) diagnosis was assigned at each preceding visit. Symptomatic therapies were recommended. She was prescribed a short course of systemic steroids, which resulted in mild and transient improvement.

Physical Examination

The patient's vital signs were all normal and her physical examination was only remarkable for a persistent, dry cough. Auscultation of bilateral lungs revealed no adventitious lung sounds.

Diagnosis and Resolution



Due to the refractory and chronic nature of her cough, a chest x-ray (CXR) was obtained which revealed a mediastinal mass. The patient was referred to the emergency department (ED) for further specialist evaluation and management. She subsequently had a biopsy as an inpatient, which confirmed a diagnosis of Hodgkin lymphoma (HL).

Conclusion/Takeaway Points

- Cough is a common presenting chief complaint in the pediatric population, especially during the winter season. However, it is important to expand the differential diagnosis in patients with cough lasting longer than 4 weeks without improvement.
- The differential diagnosis for patients presenting to the UC setting with a chronic cough should be broadened to avoid delay in diagnosis of more severe, life-threatening pathologies, including Hodgkin lymphoma.
- When patients fail to follow the expected path of a provisional diagnosis and have multiple return visits, expanding the differential and work-up can mitigate the risk of serious diagnosis errors.
- Hodgkin lymphoma is one of the most common cancers in adolescents. It has excellent rates of cure with current therapies, particularly when diagnosed in early stages
- Clinicians practicing in UC settings must be cognizant of the possibility of falling subject to biases, such as premature closure.

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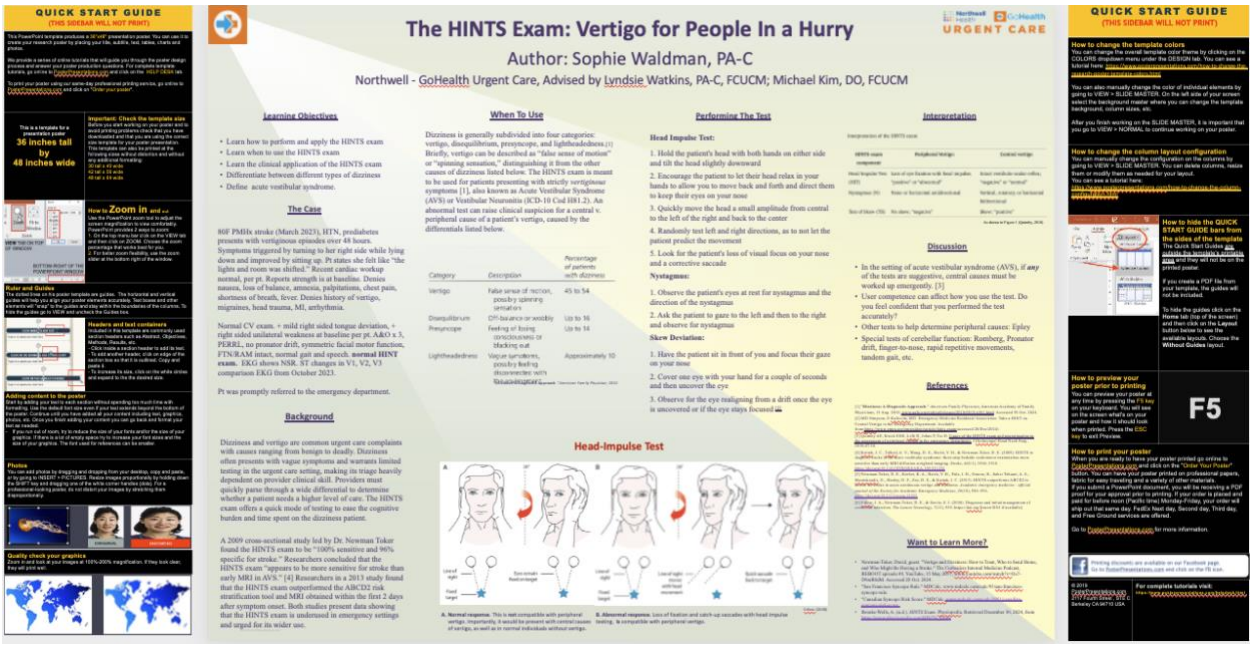
The HINTS Exam: Vertigo for People in a Hurry

By Sophie Waldman, PA-C

This poster was displayed at the 2025 Urgent Care Convention in Dallas, TX.



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Urgent Care Evaluation and Management of Elbow and Forearm Pain in Adults

Excerpted from Dunbar J, Olympia R. Urgent care evaluation and management of elbow and forearm pain in adults. Evidence-Based Urgent Care. March 2025. © EB Medicine

Editor's Note: The following content is a summarized excerpt from the cited article. It is not an exhaustive review of the condition but rather a focused highlight of the key points.

Introduction

Pain in the elbow and/or forearm is a common presentation in acute care settings. Elbow and forearm injuries represent almost 15% of emergency department (ED) visits for upper extremity injuries.1 These concerns are frequently traumatic in origin and must be appropriately managed to prevent future functional limitations or other deficits. Joint dislocations comprise about 11% to 28% of all elbow injuries,2 and elbow fractures represent 5% of all fractures.1,3

Differential Diagnosis

The causes of elbow and forearm pain range from benign chronic conditions to acute limb-threatening concerns. The majority of diagnoses will be primarily musculoskeletal in origin, including degenerative disease, overuse injuries and acute traumatic injuries. (See Table 1.)

Table 1. Differential Diagnosis of Nontraumatic Elbow Pain

Condition	Symptom Onset	Key Features	Mimics
Olecranon bursitis (nonseptic)	Acute	· Pain over the posterior elbow · Boggy fluid collection over the elbow · Possible history of trauma or repetitive friction	Septic bursitis
Septic bursitis	Acute	· Pain over the posterior elbow · Associated with erythema and swelling · Possible history of trauma	Nonseptic bursitis
Septic arthritis	Acute	· Pain throughout the elbow · Worse with both passive and active ROM	Gout

Compartment syndrome	Acute	· Extreme pain · Paresthesia · Pallor · Lack of pulses · Poikilothermia · Often associated with fracture	· Deep vein thrombosis · Acute limb ischemia · Peripheral vascular disease
Ulnar neuropathy	Acute (more common with fractures) or chronic	· Pain or paresthesia in the fourth and fifth finger · Worse after prolonged periods of elbow flexion · Positive Tinel sign	· Cerebrovascular accident · Cervical radiculopathy
Biceps tendinopathy	Acute (more common with tears) or chronic	· Tenderness over distal biceps tendon · Pain worsens with supination and pronation · Weakness with supination may be present with tears	Osteoarthritis
Triceps tendinopathy	Chronic (but can have an acute flare)	· Pain at the posterior elbow · Worse with extension · Weakness with extension may be present with tears	Osteoarthritis
Lateral epicondylitis	Chronic (but can have an acute flare)	· Pain over the lateral elbow · Worse over the common extensor tendon · Associated with repetitive movements (“tennis elbow”)	Osteoarthritis
Medial epicondylitis	Chronic	· Pain over the medial elbow · Worse over the common flexor tendon	Osteoarthritis

		· Associated with repetitive movements (“golfer’s elbow”)	
Osteoarthritis	Chronic	· Pain worsens with repetitive movements · Isolated joints · Only occurs in about 2% of the population	· Gout · Rheumatoid arthritis
Rheumatoid arthritis	Chronic	· Symptoms improve throughout the day · Systemic · Symmetrical	· Gout · Osteoarthritis

Urgent Care Evaluation

Key history and physical examination findings can support the diagnosis and guide any further testing.

History

The initial history should include elements to better characterize the pain and establish a timeline of symptom onset and duration or activities that exacerbate pain. Ask about:

- Any recent trauma or repetitive activities
- Movements or activities that exacerbate pain
- Relevant surgical history
- Any chronic medical conditions and medications

Physical Examination

The physical examination of the elbow and forearm should include the following assessments:

- Assess joint function
- Flexion, extension, supination, pronation
- Passive and active ROM and strength of muscles
- Assess neurovascular status
- Pulses, capillary refill and sensation
- Assess for red flags
- Tissue defects suggesting open fracture

Diagnostic Studies

Imaging Studies

No guidelines have been universally agreed upon for imaging of acute elbow pathologies.5 Generally, after traumatic injury, an adult patient who has full range of motion of the elbow (flexion, extension, supination, pronation) does not require radiographs.

- X-rays: Should be obtained after trauma resulting in limited range of motion5, to exclude osteoarthritis6 or for neurologic symptoms in the median nerve distribution (possibly secondary to a supracondylar process).3 It is recommended to obtain anteroposterior and lateral x-ray. When there is high suspicion for intra-articular fractures, it is also appropriate to obtain an oblique (Greenspan) view.
- Magnetic resonance imaging: The superior imaging modality for evaluating chronic elbow and forearm pain and is most useful for diagnosing ligamentous injury, tendinopathies and joint effusions.

- Computed tomography: Less utility in evaluation of chronic elbow pain, although may be indicated if there is concern for occult fracture or an intra-articular body.8
- Ultrasound: When performed by a trained evaluator, this may be useful in specific cases, typically when there is high suspicion for tendonitis.10,11

The presence of a posterior fat pad on x-ray is always pathological and, in adult patients, is typically associated with an occult radial head fracture.5 The anterior fat pad is a less specific radiologic finding, as it is often visible in normal x-rays. However, when there is fracture or effusion, the anterior fat pad becomes lifted away from the periosteum, and appears to form a triangular shape, called the "sail sign."

Radial head fractures are among the most common fractures in adult patients. Inspect the x-ray for cortical defects at the neck or at the radial head extending into the joint. Presence of a posterior fat pad may be the only evidence of radial head fracture. Coronoid process fractures can be mistaken for radial head fractures. Obtaining multiple x-ray views will help ensure correct identification of coronoid process involvement.5

Laboratory Testing

Fluid analysis must be obtained when there is concern for joint infection. Bursal fluid analysis is required to differentiate between septic and aseptic bursitis.8 Joint fluid analysis is required to diagnose septic arthritis.12 These tests must be obtained as soon as possible, and patients should be directed to the nearest facility that has this testing capability. Additional studies, including a complete blood count with differential and inflammatory markers (C-reactive protein and erythrocyte sedimentation rate), can be obtained to support the diagnosis, but should not be used to exclude infection.

Urgent Care Management

Overuse Injuries

Basic treatment strategies for overuse injuries center on pain control and decreasing inflammation:

- Patients should rest the affected elbow and refrain from the activity or motion that brings on pain.
- Compressive dressings and elevating the elbow above the level of the heart will reduce swelling and decrease pain.
- Applying ice to the injured area can also help reduce inflammation, but ice should never be directly applied to the skin.
- Nonsteroidal anti-inflammatory drugs (NSAIDs) have been shown to be beneficial in short- term use (1-2 weeks) when used either as a topical preparation or taken orally.14
- After trialing these initial therapies, patients may be ready to begin a slow return to normal activity, taking caution to continue modifying motions that trigger pain. Some conditions respond well to physical therapy and rehabilitation programs.7

Osteoarthritis

- First-line therapy includes topical NSAIDs, oral NSAIDs, and activity modification.9

- Patients can be discharged to primary care for follow-up.9

Rheumatoid Arthritis

- Safe for patients taking methotrexate to trial oral NSAIDs (except anti-inflammatory doses of aspirin).17 Selective NSAIDs such as celecoxib may be more effective than traditional NSAIDs.18
- Low-dose prednisolone (15 mg daily for 2 weeks) can be considered on an individual basis.19

Lateral Epicondylitis ("Tennis Elbow")

- First-line treatment: rest, activity modifications and up to 4 weeks of oral NSAIDs.20,21 Topical NSAIDs in gel form may also be effective.21
- Alternative conservative therapies include counterforce bracing or wrist extension splinting.
- Refer to physical therapy as it reduces pain and improves joint function.23
- Return to activity as symptoms allow with nonurgent primary care follow-up.22

Medial Epicondylitis ("Golfer's Elbow")

- Oral NSAIDs can be given for up to 2 weeks.24
- Counterforce bracing, especially when used overnight.24
- Avoid prolonged elbow immobilization as it can contribute to joint stiffness.
- Return to activity as symptoms allow and refer to physical therapy.24,25
- Nonurgent primary care follow-up.25

Ulnar Neuropathy

- Acute ulnar neuropathy due to fracture requires referral to ED for emergent orthopedic evaluation.1
- Chronic condition: educate on avoiding arm positions that provoke pain.
- No high-quality evidence supports night-time bracing or corticosteroid injections.
- Discharge to primary care follow-up for chronic cases.

Distal Biceps and Triceps Tendinopathies

- Biceps and triceps tendinopathies should initially be managed with conservative therapies (e.g., activity modification and pain control and referral to physical therapy.14
- Partial tears can be referred to primary care follow-up or orthopedic consultation.
- Complete tears should be referred for orthopedic follow-up in 1 week.4,5
- Slings can be used for comfort, but prolonged immobilization is not recommended due to risks of stiffness and muscle atrophy.14

Olecranon Bursitis (Nonseptic)

- Conservative therapies: oral NSAIDs and compression bandaging.

- Needle aspiration or aspiration with steroid injection is not more effective than conservative therapies and carry higher risk of complications.
- High treatment failure rate at 4 weeks; may require more invasive therapy.28
- Nonurgent orthopedic follow-up if advanced therapies are needed.

Septic Bursitis

- Urgent aspiration for bursal fluid analysis required.
- If aspiration is not available in Urgent Care: prompt referral to ED for analysis.37
- Confirmed septic bursitis: 10 days of oral antibiotic therapy with methicillin-resistant Staphylococcus aureus coverage.
- Immunocompromised patients, systemic symptoms, or high suspicion for joint involvement: refer to ED for IV antibiotics.37

Septic Arthritis

- Urgent arthrocentesis for joint fluid analysis required.
- If arthrocentesis not available in Urgent Care: prompt referral to ED.12
- Confirmed septic arthritis: hospital treatment with IV antibiotic therapy.

Compartment Syndrome

- Early signs: abnormal pain ("out of proportion"), compartment tension (firmness), passive traction pain.38
- Late findings (not required for diagnosis): motor palsy, paleness, pulselessness.38 (See Table 2.)
- Immediate referral to ED if concerned for compartment syndrome.5,38 Delays in care increase risk of permanent limb injury or amputation.

Table 2. The 5 "P's" of Compartment Syndrome

1. **P**aresthesia: Sensation of numbness or tingling can be an early sign.
2. **P**oikilothermia: Extremity may become cool to touch.
3. **P**alsy: Motor weakness can be a late sign.
4. **P**ale: Pale extremity or poor capillary refill can be a late sign.
5. **P**ulseless: Absent distal pulse is a late sign.

Fractures and Dislocations

Radial Head Fractures

- Isolated, nondisplaced or minimally displaced (<2 mm): pain control, posterior long arm splint for several days, nonoperative early use.3,5,30
- Early elbow mobilization typically recommended within 2 days.5,29

- Comminuted, displaced (>2 mm), or complete articular fractures: refer for close orthopedic follow-up.3,5
- Open fractures, unstable joints or neurovascular deficits: posterior long arm splint and refer to ED with orthopedic consultation.5

Proximal Ulnar Fractures

- Isolated nondisplaced fractures: posterior long arm splint and orthopedic follow-up in 1 week.
- Fractures with 10° to 15° angulation, 50% displacement, or with radial head dislocation (Monteggia fracture): refer to ED with orthopedic consultation.5

Distal Humerus Fractures

- Typically result from FOOSH (fall on an outstretched hand), especially in elderly population.
- Isolated nondisplaced fractures: posterior long arm splint and orthopedic follow-up in 1 week.
- Partial or complete articular fractures: prompt referral to ED with orthopedic consultation due to high risk of complications.5

Olecranon Fractures

- Extra-articular stress (incomplete) fractures: conservative therapy with activity modifications, long arm splint, orthopedic follow-up in 1 week.4,31,5
- Stable, nondisplaced (<2 mm) with intact extensor function: pain control and orthopedic follow-up in 1 week.4,5,32
- Displaced (>2 mm), unstable, or associated with dislocation: prompt referral to ED with orthopedic consultation.33
- Prior to discharge/referral: posterior long arm splint between 45° and 90° of flexion.5

Coronoid Process Fractures

- Type I (avulsion fractures of tip): conservative management.5
- Type II (avulsion fractures >50%): orthopedic follow-up for surgical repair.5
- Type III (displaced fractures) or associated with ulnar dislocation/radial head fractures: refer to ED with orthopedic consultation.
- Prior to discharge: posterior long arm splint at 90° flexion.5,34

Elbow Dislocation

- Open fractures, anterior dislocations, neurovascular compromise: splint and refer to ED with orthopedic consultation.2,5
- Simple dislocations (no associated fracture): Urgent Care clinicians can attempt reduction with multimodal analgesia if confident.
- Unsuccessful reduction or requires conscious sedation: refer to ED.2

- Post reduction: obtain x-rays to evaluate for subluxation/dislocation in extension.
- Apply posterior splint for comfort; successful reductions need orthopedic follow-up in 1 week.2

Urgent Care Disposition

Disposition plans depend on the most likely diagnosis and the need for additional testing.

- Patients with chronic conditions for whom there is no evidence of neurovascular compromise or infection (e.g., osteoarthritis, rheumatoid arthritis, lateral epicondylitis, and medical epicondylitis) may be discharged with recommendations for primary care follow-up.
- Patients with a suspected new diagnosis of rheumatoid arthritis (or poorly managed rheumatoid arthritis) should be referred to a rheumatologist with primary care follow-up in the meantime.
- Patients diagnosed with simple closed fractures, tendon injury, and chronic conditions that have failed conservative therapies may be referred for orthopedic evaluation.

General recommendations for nonurgent concerns are to follow up in 5 to 7 days. Injuries with an open fracture, a high-risk fracture pattern, an unstable joint, or neurovascular compromise should be referred to an ED for orthopedic consultation. Other situations that warrant referral to an ED include a high-risk elbow dislocation or concern for a septic joint.

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Legal Lessons: It's Just a Flesh Wound… or Is It?

By Kelly Heidepriem, MD

In the fast pace of Urgent Care, lacerations are our bread and butter. A few sutures, a tetanus shot and a cheerful "all set!" send many patients back out the door feeling stitched-up and satisfied. But some of those patients come back—with more than meets the eye. One of the biggest (and most litigious) culprits? Missed glass foreign bodies in lacerations.

When a Cut Isn't Just a Cut

Let's start with two real cases featured on Dr. Eric Funk's website, Med Mal Reviewer.

Case 1: A 35-year-old man comes in after falling while carrying a glass. He had a 4 cm open laceration on his forearm, and his neurovascular exam was normal. It was irrigated, sutured and he was sent home. A few months later, he's back—with numbness, weakness and pain in his hand. Turns out, there was a shard of glass left behind. A hand surgeon finds it and removes it, but the patient now has permanent dysfunction from an ulnar nerve injury. He sues.

Case 2: A 45-year-old man sustained a laceration to the webspace between his index and middle fingers after dropping a glass at work. At initial presentation, he had full flexion and extension and was discharged after the wound was sutured. Over the following months, he continued to experience persistent pain and noticed a palpable bump in the area. A hand surgeon eventually removed a thin sliver of glass measuring 1.5 cm by 2 mm. The patient pursued legal action.

Glass Happens. Here's What to Do About It.

We don't share this to stoke fear, but to emphasize the high stakes of missed glass in hand lacerations and the value of a few simple practices that can help protect both our patients and ourselves.

1. Know When to Image

We're not suggesting an X-ray for every paper cut. But for any lacerations involving glass—or anything likely to splinter—imaging can be crucial. Why should we not just trust our gut?

- Glass shows up well on X-ray: Studies show that 2mm glass fragments have a 99% detection rate on plain films, and even 1mm pieces are detected 83% of the time.
- Patient complaints are unreliable: The positive predictive value of a patient feeling like something's in there? Just 31%.
- Ultrasound has a role too: If you've got it, it can be helpful for detecting foreign bodies, especially if the X-ray is negative and suspicion remains high.

Bottom line: If there's a reasonable chance glass got into the wound, get the X-ray. Especially in the hand, where the consequences of a missed shard can be severe: just think of all those little nerves in your hand that control precise, fine movements!

2. Document Like a Pro

As always, a good and well-documented neurovascular exam can be your best defense. Include the usual suspects: flexion, extension, two-point discrimination, capillary refill, radial pulse, etc. Some clinicians even re-check and document neurovascular status after wound closure or reduction.

Here's my dot phrase that I use as a mental checklist of all the things you should check for an exam:

"Able to flex/extend all DIP, PIP, MCP, IP joints; sensation intact to radial, median and ulnar nerve distributions; capillary refill <2 seconds; no scissoring or angulation. Digits neurovascularly intact."

This will help you remember to be thorough and catch any deficits on Day 0.

3. Don't Forget the Follow-Up Plan

Another missed opportunity in both cases? Patient education. Even if a wound seems clean and neurovascularly intact, set the stage for what to watch for and when to return.

Say something like:

"There's a small chance that a tiny piece of glass could still be inside. Even though we don't see anything now. If you notice new pain, numbness or a bump, come back and see us or follow up with this hand specialist." … and then give them the name of your go-to neighborhood hand surgeon.

Then document the conversation. It's not about covering yourself—it's about preparing the patient and giving them a plan. Patients will likely be less surprised about a complication if you had warned them that it was a possibility and also provided them with an avenue to address it.

4. Remember: Hands are High Risk

Both of these legal cases involved hand lacerations. Hands are intricate, functional and unforgiving of missed injuries.

Final Takeaways

- Glass in lacerations is more common than you think—foreign bodies are found in up to 15% of hand wounds that get imaged, and in 7–9% of all wounds caused by glass.
- Don't rely on patient perception–or your own perception–alone to guide imaging decisions.
- Radiographs have excellent sensitivity for most glass—use them when there's even a sliver of doubt.
- Document your exam, your thought process and your patient instructions with clarity.
- And remember: Giving patients a heads-up about what could go wrong might be the most important suture you place.

Get more info at Hippo's Urgent Care RAP here!

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Pediatric Research Briefs

A Different Approach to Toddler's Fractures – Another Shift in Paradigm?

Boutin A, Colaco K, Stimec J, et. Al.

Removable Boot vs Casting of Toddler's Fractures: A Randomized Clinical Trial.
JAMA Pediatr. 2025 Apr 21;179(7):713–21. doi: 10.1001/jamapediatrics.2025.0560

Toddler's Fractures (TF) are the most common lower limb fracture seen in young children under the age of 5. This was a pragmatic, multicenter, assessor-blinded, 2-arm, noninferiority randomized clinical trial of children 9-months to 4-years diagnosed with TF by an ED physician at 4 Canadian urban, tertiary care children's hospitals. Participants were randomly assigned in a 1:1 ratio to receive a prefabricated removable boot or casting. Follow-up was at 4 weeks via a virtual (video) visit where caregivers reported complications, weight-bearing, baseline activities, duration of immobilization device use, satisfaction, preference and any health care resource use after the initial ED visit. The study found removable boot without physician follow-up was non-inferior to circumferential casting in children with TF.

Editors' Comments: This is another in a series of treatment of injuries in children where the prevailing "less is more"' approach is potentially a viable option to present conventional protocols. This is a further shift in the paradigm, moving away from traditional plaster casting – which is already recognized treatment in wrist torus fractures.

There were some limitations to this study, primarily the lack of blinding for the caregivers. The other was the high attrition rate of children in the casting group, who were lost to follow-up, which may lead to attrition bias and unmeasured confounders. This study does provide potential for UC based investigations to ascertain whether a similar cohort could be treated with less requirement for follow-up. UC clinicians are advised presently to follow the local guidelines on TF management until such time as there is UC specific evidence to support this method of treatment.

Chaperone for Examination of Adolescent Patients

Berhane A, Hackell J, Wallace S; Committee on Practice and Ambulatory Medicine; Committee on Adolescence

Use of Chaperones for the Pediatric and Adolescent Encounter: Policy Statement.
Pediatrics. 2025 Jun 1;155(6):e2025071810. doi: 10.1542/peds.2025-071810. PMID: 40383537.

The requirement for physical examination is crucial for the delivery of care to all patients. Some of these examinations may be perceived as uncomfortable or intrusive by patients, particularly young children and those in adolescent age groups. The American Academy of Pediatrics (AAP) recommendation that a chaperone be present for potentially distressing examinations and inspections of certain body areas of children and adolescents is consistent with guidelines and policies from other national organizations of physicians, including the American College of Obstetricians and Gynecologists, the American Medical Association and those issued in other countries, such as the General Medical Council in the United Kingdom.

The purpose for considering the use of a chaperone during a clinical encounter is to optimize the patient's feelings of safety and comfort.

This policy statement has several recommendations:

1. *All clinical practice settings are strongly encouraged to develop chaperone policies to provide a safe and comfortable environment for pediatric patients.*
2. *Each clinical setting should assess its ability to provide chaperones when determining policies, including workflow and staffing considerations.*
3. *Clinical staff members are the preferred choice for chaperones.*
4. *Pediatric clinicians should preferably include the roles of the chaperone using an opt-out approach to avoid any issues of imbalance of power or control.*

Editor's Comments: This is an important topic and needs careful consideration particularly for UC clinicians that may be the only clinical staff member on-site. Having robust organizational policies and procedures in-place will help guide UC clinicians on the matter. This consideration is particularly relevant due to the potential vulnerability of children, especially regarding intimate medical examinations.

Accuracy of ChatGPT in Answering Post-Discharge Questions

Gupta M, Kahlun A, Sur R, et. al.

Accuracy, appropriateness, and readability of ChatGPT-4 and ChatGPT-3.5 in answering pediatric emergency medicine post-discharge questions
Pediatr Emerg Med J 2025;12(2):62-72

This was a pilot study to investigate the potential of the two versions of ChatGPT to accurately and consistently answer follow-up questions for pediatric patients discharged from the ED. Twenty-three questions were posed to the two versions of ChatGPT as collated from emergency physicians working with pediatric patients.

The authors found ChatGPT-4 demonstrated slightly better performance than ChatGPT 3.5 in accuracy and appropriateness of answers to the questions posed to it. They did however find that both versions of ChatGPT showed decreased appropriateness and accuracy in questions regarding medication dosing, particularly for over-the-counter medications, such as ibuprofen, acetaminophen and polyethylene glycol. These findings align with previous research cautioning against relying on AI for medication instructions and highlight a critical area for improvement in the LLMs.

Editor's Comments: This is another in a long list of studies looking at ways to incorporate AI tools into healthcare. While continuing to show promise, there are still areas where AI has gaps in its ability to provide the same level of care and information as a clinician would. There remains a requirement for human involvement in most clinical situations, even as technology advances and narrows the gap.

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London Representative Faculty of Prehospital Care, Royal College of Surgeons Edinburgh

URGENT UPDATES

Trends in Prenatal Exposure to Antiseizure Medications Over the Past Decade A Nationwide Study

A recent French registry study (2013–2021) observed a total of **55,801 pregnancies** with antiseizure medication (ASM) exposure during the first trimester. Over the decade, use of *safer ASMs*—notably **lamotrigine** and **levetiracetam**—rose by ~30%, while exposure to **high-risk ASMs** like **valproate/valpromide** fell by over 80%. However, **carbamazepine** and **topiramate** exposures declined only marginally, and newer agents with uncertain risk (e.g. pregabalin, gabapentin) saw increased utilization. **Socioeconomically disadvantaged women** remained disproportionately more exposed to higher-risk medications. Overall, the study highlights a promising shift toward prescribing lower-risk ASMs during pregnancy—but underscores ongoing concerns about persistent use of drugs with known teratogenic potential and disparities in exposure. Full Access: American Academy of Neurology

Diverticulitis: A Review

The JAMA review highlights that diverticulitis is increasingly managed in outpatient settings, with many cases not requiring antibiotics. For uncomplicated diverticulitis, supportive care alone is often sufficient, as antibiotics do not speed recovery or reduce complications. CT imaging is key for diagnosis, while complicated cases may require hospitalization, antibiotics, or surgery. This reflects a shift toward more conservative, evidence-based management. Full Access: JAMA

When Patients Arrive with Answers

A family physician reflects on the evolving clinician-patient dynamic in which patients come armed with medical advice generated by AI tools like ChatGPT. The essay explores the tension between this wealth of pre-arranged information and the patient's deeper need to feel truly heard and understood. Through narrative medicine, Dr. Sundar illustrates how listening empathetically—rather than debating content—can deepen trust, honor patient autonomy, and enhance therapeutic relationships. Full Access: JAMA

Regular Use of Opioids and Dementia, Cognitive Measures, and Neuroimaging Outcomes Among UK Biobank Participants With Chronic Non-Cancer Pain

A UK Biobank cohort study examined the relationship between **regular opioid use for chronic non-cancer pain** and long-term cognitive outcomes, including dementia risk, cognitive performance, and brain structure. Researchers found that participants who regularly used opioids had an **18% higher risk of developing all-cause dementia** compared to those who used non-opioid pain medications. The risk was even greater among users of **strong opioids,** who demonstrated up to a **70% increased risk of dementia** and a **150% increased risk of vascular dementia.** Full Access: Journal of the Alzheimer's Association

The Effect of Misinformation and Disinformation on Physicians' Ability to Provide Quality Care

More than 60% of surveyed U.S. physicians reported that their patients were influenced by health misinformation or disinformation over the past year, with nearly 90% saying it's increased compared to five years ago. This influx of inaccurate information is undermining patient safety and damaging the doctor–patient relationship, with 57% stating it has a **significant impact** on their ability to deliver quality care. Full Access: The Physicians Foundation.

Empirically Derived Evaluation Requirements For Responsible Deployments of AI in Safety-Critical Settings

Researchers demonstrate that augmentative AI—designed to support nurses in recognizing imminent patient emergencies—can both enhance and impair human decision-making depending on the accuracy of the AI's recommendations. Specifically, when the AI was accurate, nurses performed better; but when it was misleading, their performance deteriorated—even when explanations were provided. Based on these findings, the authors argue that safe and responsible deployment of AI in critical settings requires two essential evaluation steps: (1) testing how humans and AI perform together, and (2) assessing AI across a spectrum of performance scenarios—from strong to poor—to uncover potential harms. Full Access: Nature

New ACC/AHA Guideline Addresses Prevention, Detection, Evaluation and Management of High Blood Pressure

The new guideline—published August 14, 2025—updates the 2017 recommendations and places greater emphasis on **early detection, personalized risk assessment, and treatment** of hypertension in adults. It introduces the **prevent** risk calculator to better tailor cardiovascular risk and treatment decisions, incorporates broader screening for conditions like primary aldosteronism, and recommends continued use of combination antihypertensive therapy, including consideration of newer treatments such as **GLP-1 agents** for overweight or obese patients. Full Access: American College of Cardiology

Systems-Based Care of the Injured Child: Policy Statement

The AAP's new policy, **"Systems-Based Care of the Injured Child"** highlights that injuries are the leading cause of childhood death and disability and calls for a cohesive, system-wide approach to trauma care. It emphasizes ensuring the "right child, at the right place, at the right time" through integrated trauma systems that span prevention, prehospital care, emergency treatment, rehabilitation, and reintegration into the community. The policy stresses the need for universal pediatric readiness in all care settings, inclusion of mental health support and abuse recognition, and efforts to promote equity. It also calls for robust data collection, research, and advocacy to strengthen pediatric trauma systems and improve outcomes. Full Access: AAP

Brain Abnormalities in Children Exposed Prenatally to the Pesticide Chlorpyrifos

A longitudinal cohort study of approximately 270 children (ages 6–14) in New York City found that higher prenatal exposure to the insecticide chlorpyrifos was dose-dependently linked to widespread brain changes—including thicker cortical regions, reduced white matter volumes, altered

microstructural integrity, and lower cerebral blood flow—as well as poorer fine motor and motor programming performance. Full Access: JAMA

Vaccine Integrity Project Presents Reassuring Data on Vaccines for Upcoming Respiratory Virus Season

The Vaccine Integrity Project (VIP), launched by CIDRAP, conducted an extensive evidence review of recent studies on COVID-19, influenza, and RSV vaccines—especially for children, pregnant individuals, and those with weakened immunity. After screening nearly 17,000 abstracts and reviewing 1,406 full-text articles (including 50 randomized controlled trials), the panel found no new safety concerns or drops in effectiveness among these key groups, though a potential risk of preterm birth associated with the RSV vaccine in pregnancy was noted. Full Access: CIDRAP

Study Suggests Probiotics May Suppress Antibiotic Resistance Genes in Preterm Infants

A recent UK study examined very-low-birth-weight (VLBW) preterm infants—some of whom received probiotic supplementation with Bifidobacterium bifidum and Lactobacillus acidophilus, while others did not. Those given probiotics exhibited notably fewer antibiotic resistance genes (ARGs) and multidrug-resistant (MDR) pathogens in their gut, even when exposed to antibiotics. The probiotics appeared to help the gut microbiome resemble that of full-term infants more closely, without increasing horizontal gene transfer risks. Full Access: Nature

Children Living in Socially Vulnerable Areas Have More Asthma ED Visits at Start of School

Children living in neighborhoods with higher social and economic vulnerability experience disproportionately larger spikes in asthma-related emergency department (ED) visits at the start of the school year. The study, conducted across major Texas cities, found that asthma ED visit rates increased by approximately **60 cases per 100,000 person-years** in high-SVI (Social Vulnerability Index) areas—three times more than the **20-case increase** observed in low-SVI areas. These findings highlight how underlying neighborhood disadvantage elevates the risk of virus-triggered asthma exacerbations during back-to-school periods. Full Access: Helio

CAUSE FOR APPLAUSE Q3 2025

Six New Fellows and a New Accredited Fellowship Program in Q3

The College of Urgent Care Medicine is proud to introduce its Q3 Fellows (FCUCM):

Justin Bowles, MD, FCUCM

Justin Bowles, MD, FCUCM is a highly experienced family medicine physician and medical educator with extensive clinical, teaching and leadership roles in Urgent Care and family medicine. His career spans military service, serving underserved populations and leadership in medical education programs, notably developing a successful APP Urgent Care Fellowship. Bowles' compassion and dedication is demonstrated through published research, teaching medical residents and his pivotal role in developing a successful Urgent Care fellowship program.

Mona McArdle, MD, FCUCM

Mona McArdle, MD, FCUCM has contributed significantly to the healthcare field and is currently serving at Valley Immediate Care in Medford, Oregon. As a result of her dedication and expertise, Dr. McArdle has made impactful strides in medicine, benefiting countless patients and advancing medical practices within her community. Stepping up and volunteering when her community needed her most, McArdle mobilized her centers in the early days of Covid and volunteered at a temporary medical station to help evacuees during the Almeda fires.

Salisia Valentine, DNP, FNP-C, MSN, RN, FCUCM

Salisia Valentine, DNP, FNP-C, MSN, RN, FCUCM is a Family Nurse Practitioner and healthcare leader with over ten years at American Family Care. She has served as Vice President of Provider Services and Interim Medical Director, managing 50+ clinicians. Named Alabama's Nurse Practitioner of the Year from NPAA, Salisia stands out for her clinical skill, commitment to clinician growth and patient-centered approach. She holds advanced degrees in nursing, has experience in clinical education and has played a key role in developing provider onboarding and continuing education programs.

Joshua Stone, PA-C, FCUCM

Joshua Stone, PA-C, FCUCM has distinguished himself through dedicated service and clinical excellence at Go Health, where he has accumulated over 5,000 patient care hours across nine years. Serving as a faculty preceptor, he educates Fellows in medical knowledge, procedural skills and antibiotic stewardship, while also emphasizing thorough documentation. As an active member of the Emergency Response Training Team, he leads mock code training throughout the New York market, demonstrating both leadership and commitment to quality patient care and professional development.

Ivan Koay, MBChB, MRCS, FRNZCUC, MD, FCUCM

Ivan Koay, MBChB, MRCS, FRNZCUC, MD, FCUCM is an accomplished physician with international experience across the UK, New Zealand and Ireland. He has excelled in clinical roles, academic research and medical education, contributing to numerous peer-reviewed journals and conferences. Dr. Koay's mentorship of trainees and nurse practitioners, along with his leadership and volunteer work, exemplifies his dedication to advancing Urgent Care medicine and positively impacting both patients and colleagues. He has significantly influenced and advanced the practices and standards within Urgent Care.

Lindsey Fish, MD, FCUCM

Lindsey Fish, MD, FCUCM stands out as an accomplished physician-leader, researcher and educator. She established and is the Medical Director for the Peña Southwest Urgent Care Clinic at Denver Health and has been pioneering Urgent Care research. She also was recently selected to represent the Urgent Care College of Physicians on the AMA's Specialty and Service Society. She excels clinically, has contributed over thirty publications and is serving as editor-in-chief of the Journal of Urgent Care Medicine. Dr. Fish also mentors aspiring clinicians and educates the community through multiple channels, embodying excellence and leadership in Urgent Care.

Congratulations to our new Fellows and thank you for your incredible work and contributions to the Urgent Care field of medicine.

Yale New Haven Health Urgent Care Fellowship Program Achieves CUCM Accreditation

The College of Urgent Care Medicine is pleased to announce Yale New Haven Health Urgent Care for its commitment to the next generation of Urgent Care clinicians. Yale New Haven Health Urgent Care has had its post-graduate fellowship program accredited by the College of Urgent Care Medicine, becoming the 5th program to achieve the distinction. Jasmeet Bhogal, MD, FCUCM, Chair of the Fellowship Accreditation Committee, acknowledged the program, stating, "The College developed its Standards and the accreditation program recognizing the uniqueness of Urgent Care medicine and the need to address its nuances when onboarding clinicians. We are thrilled to see organizations like Yale New Haven embrace that vision and demonstrate the quality of their program by pursuing the distinction. On behalf of the College and the Fellowship Accreditation Committee, I want to extend our gratitude to the clinical leadership at Yale New Haven and the other programs they now join as CUCM Accredited Post-graduate Fellowship programs."

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