

# URGENT CARING

A PEER-REVIEWED PUBLICATION

Empowering Clinicians,  
Enhancing Quality of Care

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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

## 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**  
Editor-in-Chief

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# Op-Ed: Ring Entrapment Management in Urgent Care: The Case for FDA-Registered Medical Devices

Kevin Spencer, MD<sup>a</sup> & Chris Cowper-Smith, PhD<sup>b</sup>

## Introduction

Rings hold significant cultural and personal value and are worn by over 55% of the U.S. adult population.<sup>1</sup> 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.<sup>2</sup>

The complexity of removal depends on the techniques and tools used, the ring's material and the nature of the entrapment.<sup>3,4</sup> 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.<sup>5</sup> Modern ring cutters have largely overcome these challenges, and equipment selection is therefore important.<sup>6,7</sup>

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.<sup>1</sup>

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.<sup>2,8,9</sup>

## 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.<sup>8,10,11</sup> Similarly, Vice Grips (locking pliers) have been described as a method to apply high forces in an attempt to shatter certain brittle ring materials.<sup>11</sup> However, this approach requires precise knowledge of the ring's composition, and improper execution can result in sharp fragments causing injury.<sup>10</sup>

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.<sup>1</sup>

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.<sup>7</sup> 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.<sup>2</sup>

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.<sup>12</sup>

## 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.<sup>1</sup> 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.<sup>2-4</sup>

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.<sup>6</sup>
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.<sup>7-8</sup>
3. **Reporting:** AI can save time and improve documentation and billing compliance by automating image labeling and the reporting process.<sup>7-8</sup>
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.<sup>7,8,9</sup>
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.<sup>9</sup> 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!<sup>9-11</sup>

## 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**

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### **Accreditation Statement**

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# 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.<sup>1</sup>

**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

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.<sup>2</sup> 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.<sup>3,4</sup>

**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.<sup>5</sup>

**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.

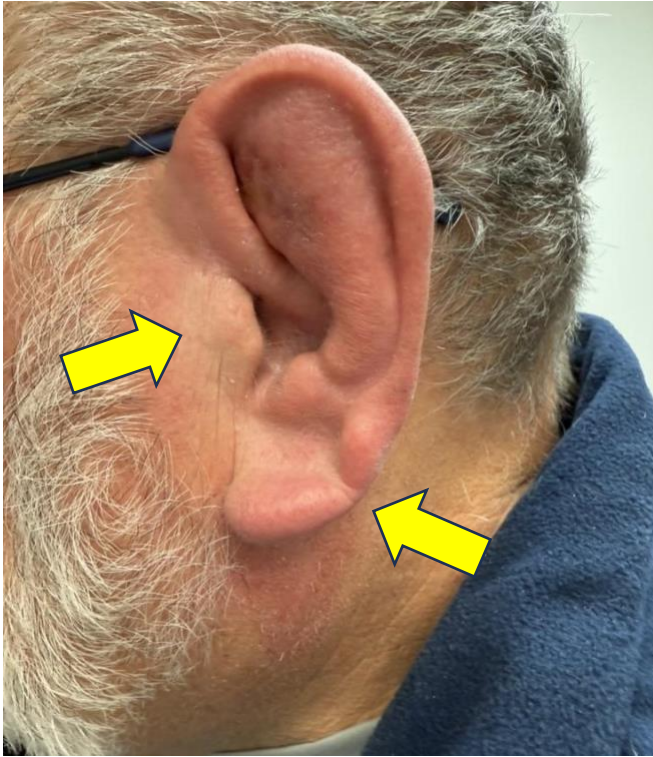
**Consider the following image**



**Solution on next page**

## 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.<sup>3 4</sup> 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](mailto:mail@EMedHome.com).

**Rick Nunez, MD, is the medical editor for [easyDOTexam.com](http://easyDOTexam.com) and the NRCME training at [EMedHome.com](http://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



pushing further in. Be careful not to stick the swab to the ear canal or the tympanic membrane <sup>™</sup>. 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

# 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.<sup>1,2</sup> 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.<sup>3-5</sup>

The exact mechanism of kidney stone formation may vary based on composition:<sup>3-5</sup> 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,<sup>1-3</sup>

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.<sup>4,6</sup> 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%)<sup>3,7</sup>
  - pH
  - Signs of infection
  - Specific gravity and ketones
  - Crystals
- Consider urine culture
- Serum chemistry if concern of electrolyte abnormality or renal function is present<sup>3,4</sup>
- 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.<sup>1-3</sup> 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.<sup>2,8,9</sup> High-risk patients should be referred to the emergency department (ED) for CT scanning.<sup>1,2,8</sup> Low-risk patients should get definitive imaging within a week.<sup>10</sup>

### 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.<sup>1-3,11</sup> Opioids may be considered for severe pain but carry risks of sedation and nausea.<sup>11-13</sup> Acetaminophen is an alternative for patients unable to take nonsteroidal anti-inflammatory drugs. (See Table 1.)

**Table 1. Pain Management for Nephrolithiasis** <sup>2,11,12,14,15</sup>

Medication	Adult	Pediatric	Important Considerations
<b>Nonsteroidal Anti-inflammatory Medications</b>			
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) <b>or</b> 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) <b>or</b> IM: 30 mg or 10-15 mg every 6 hours (max 60 mg/day) <b>or</b> 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) <b>or</b> 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 $\geq 12$ years: Oral: Immediate release formulation 25 mg every 6 hours as needed	
<b>Opioids<sup>a</sup></b>			
Morphine	IV: 1-4 mg every 1-4 hours as needed up to 10 mg every 4 hours for severe pain <b>or</b> IM <sup>b</sup> : 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 $\geq 50$ 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 <sup>c</sup>	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 $\geq 50$ 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 $\geq 50$ 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
<b>Nonopioid Analgesic</b>			
Acetaminophen	Oral: 325-650 mg every 4-6 hours or 1 g every 6 hours (max not to exceed 4 g/day) <b>or</b> IV: Adults $\geq 50$ kg: 650 mg every 4 hours or 1 g every 6 hours as needed (max not to exceed 4 g/day) <b>or</b> $<50$ kg: 12.5 mg/kg every 4 hours or 15 mg/kg every 6 hours (max	Oral: 10-15 mg/kg/dose every 4-6 hours (max not to exceed 5 doses/day) <b>or</b> Rectal: $<12$ years: 10-20 mg/kg/dose every 4-6 hours (max not to exceed 5 doses/day) <b>or</b> 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)	
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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.<sup>2</sup> (See Table 2.)

**Table 2. Medical Expulsive Therapy for Nephrolithiasis<sup>2,16-24</sup>**

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

www.ebmedicine.net

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.<sup>2</sup> 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](http://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<sup>1</sup>
2. What causes acute gastroenteritis?
  - This is usually a viral etiology
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?<sup>2</sup>
  - 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

- 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?<sup>3</sup>
- 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?<sup>4</sup>
- 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<sup>5</sup>
16. Is the rotavirus vaccine safe and effective?
- The vaccine is very effective and has decreased the incidence of rotavirus-associated gastroenteritis<sup>6</sup>

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.<sup>1,2</sup> 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](#)

# Pediatric Urgent Updates

## 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, Stackiewicz 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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# 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](mailto: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](mailto: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 6<sup>th</sup>, 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](mailto:membership@urgentcareassociation.org) to confirm or be added to your organization's roster.



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## CAUSE FOR APPLAUSE Q1 2025

# CAUSE FOR APPLAUSE



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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