

URGENT CARING

A PEER-REVIEWED PUBLICATION

Empowering Clinicians,
Enhancing Quality of Care

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



MEASLES



URGENT CARE
COLLEGE OF
PHYSICIANS



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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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Designation Statement

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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?

- Herpes zoster (HZ)*
- Lyme disease*
- Trigeminal neuralgia*
- Herpes simplex virus (HSV)*
- 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 herpette), 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

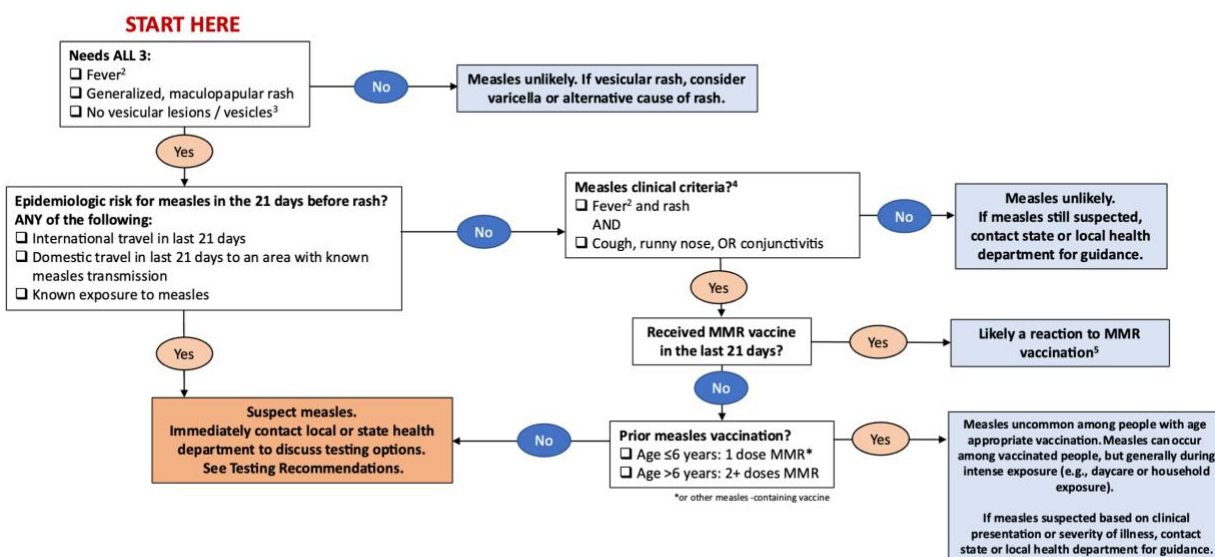
- *Keep Measles in the differential diagnosis of febrile rash illness even if there is no current outbreak in your community (2).*
- *Your facility should develop a facility specific door-to-door workflow on how to handle a suspected measles patient. Workflow should be distributed to all staff and clinicians.*
- *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).

Evaluating a patient presenting with rash when there is no local measles transmission¹



*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 period¹. 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 repaired².

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 confidence³. Procedures performed by advanced practice clinicians in other settings including emergency departments and intensive care units have been examined⁴ and demonstrated that procedural confidence grows with experience⁵ and leads to greater independence⁵.

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 systems⁶. 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 care⁷. 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 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 Designation¹ | |
| Pediatric | 215 (51.4%) |
| Occupational Medicine | 134 (32.1%) |
| Women's Health Clinic | 58 (13.9%) |
| Other | 8 (1.91%) |

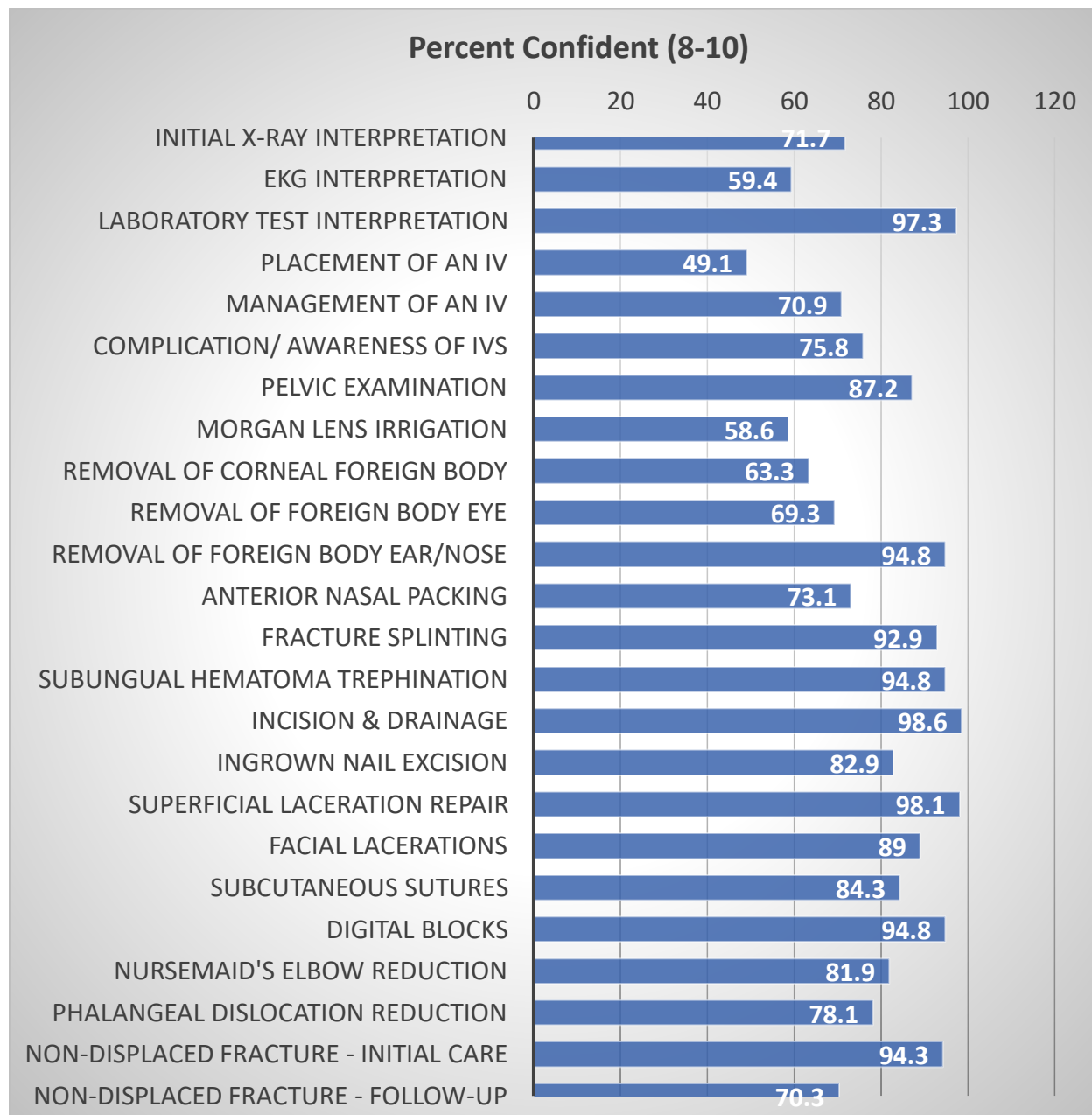


Figure 1. Survey participant responses (confident or not confident) in the 24 Urgent Care procedures.

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 | NP | OR | (95% CI) | PA | OR | (95% CI) | <i>p-value</i> |
|--|-----------------|---------------|------|--------------|---------------|------|--------------|----------------|
| | (N = 119) | (N = 45) | | | (N = 66) | | | |
| 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 | <i>p</i> -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.

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

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 | <p>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.</p> <p>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.</p> |
| Evidence-based Guidelines with Strength of Evidence | <p>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).</p> <p>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).</p> <p>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</p> |

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| | <p>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</p> <p>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.</p> |
| Discussion | <p>Acute paronychia is commonly caused by a bacterial infection, primarily from organisms such as <i>Staphylococcus aureus</i> and <i>Streptococcus pyogenes</i>. In contrast, chronic paronychia often involves different pathogens.^{1,2,3}</p> <p>Less common causative agents may include gram-negative organisms, dermatophytes, herpes simplex virus, and yeast.</p> <p>Several factors can predispose individuals to paronychia, including structural abnormalities, inflammatory diseases like psoriasis, contact irritants, excessive moisture and reactions to medications.</p> <p>Occupation and working environment information might be critical not only for diagnosing Acute paronychia but also for prevention recommendations.</p> <p>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.</p> <p>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.</p> <p>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 <i>Staphylococcus aureus</i>. 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</p> |

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| | <p>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.</p> <p>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.</p> <p>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.</p> |
| Summary | <p>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.</p> <p>Oral antibiotics should be considered for cases involving extensive cellulitis, more severe infections, immunocompromised patients, or suspected MRSA infections.</p> <p>Preventative measures, such as avoiding nail trauma and limiting exposure to excessive moisture, are essential in reducing the risk of recurrence.</p> <p>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.</p> |
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| Reviewers | Cesar Mora Jaramillo, MD, FAAFP, FCUCM |

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 tonsil 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 serous 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 physal 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 |

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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, SpO₂ 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.

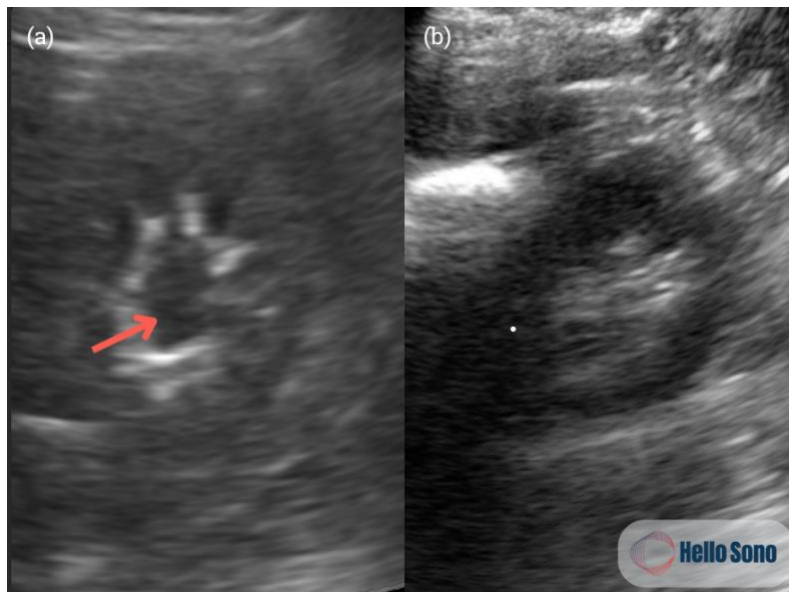
Timeline

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-Bindman et 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 \approx 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

CAUSE FOR APPLAUSE



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 Lahore, 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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