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...

COLLEGE OF URGENT CARE MEDICINE

URGENT CARE COLLEGE OF PHYSICIANS

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

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From the President

Cesar Mora Jaramillo, MD, FCUCM

As we all continue to manage high patient volume during the respiratory season, I wanted to take a moment to share some thoughts and updates. It looks like we're in for a busy winter as you can tell! With influenza-like illnesses making their presence known, there is a new variant on the radar that we need to keep an eye on.

This influenza A mutation, known as the H3N2 subvariant “subclade K,” first appeared overseas, and since it wasn’t included in this year’s flu vaccine, there are concerns about potential challenges, particularly for elderly patients and other high-risk groups.

This mismatch could reduce the vaccine’s effectiveness, leading to a possible increase in influenza-related hospitalizations. With this in mind, it’s clear we have a vital role in our communities. The access we provide is essential not just for preventing poor health outcomes, but also for helping to lower healthcare costs. When patients receive care at the right setting—like our centers— overutilization of higher cost settings is avoided.

Respiratory season aside, let’s shift gears and spotlight Urgent Care as a specialty. To begin, I want to thank all our members who took the time to participate in the specialty survey. Your input is invaluable, and together, we can continue to advocate for our specialty and push for advancements in our field. As I mentioned in my last letter, data is crucial. It helps highlight the importance of Urgent Care centers and supports our efforts to gain recognition as a legitimate specialty. Hence, I encourage each of you to be active and share your voice if you are also part of other organizations under the umbrella of your main specialty. Together, we can elevate the representation of Urgent Care and collaborate with leaders in the medical field for greater awareness and impact. Remember, just over a year ago, we took a significant step by joining the Specialty and Services Society within the American Medical Association. We’re making progress toward a seat at the House of Delegates, but it’s essential for all of us to work together to make an even bigger difference.

Lastly, I hope you found time to relax and enjoy moments with your loved ones over the holiday season and New Year. Thank you all for your hard work and dedication, especially for being the frontline urgentologists delivering quality care in our fast-paced environment. Your commitment truly makes a difference in the lives of our patients every day. Wishing you all a wonderful 2026!

From the Editor in Chief

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

Dear Colleagues,

As we find ourselves in a new year, I want to extend my warmest wishes to each of you. The beginning of each year always brings both reflection and anticipation—reflection on the challenges we've faced together, and anticipation of the opportunities that lie ahead in Urgent Care medicine.

We know that the upper respiratory season is upon us, and with it comes the familiar surge of patients seeking relief from coughs, colds, flu, RSV and COVID-19 variants that continue to test our resilience. This is the time when our skills, stamina and compassion are most needed. I want to encourage you to take pride in the vital role you play—not only in treating illness, but in providing reassurance and clarity to patients and families during uncertain times.

The College of Urgent Care Medicine is here to support you. Whether through clinical resources, educational programs or collegial networking, we are committed to strengthening our community of urgentologists. I invite you to get involved in one of the many College activities this year:

Contribute your expertise by writing for Urgent Caring, presenting a lecture or poster at a national or regional conference, or mentoring those that are newer to our specialty.

Join committees or working groups where your voice can shape the future of our specialty.

Engage with peers through networking at conferences, webinars and collaborative projects.

Through the College of Urgent Care Medicine, the connections I have made have enriched not only my career in medicine, but my life as a whole. The colleagues I've met both nationally and internationally through networking here have inspired me to be my best self—clinically and personally. Their dedication, wisdom, and friendship remind me daily of the power of community in shaping who we are as clinicians and as people.

Your participation enriches not only the College, but also the profession. Together, we can continue to elevate Urgent Care medicine, ensuring it remains responsive, evidence-based, and patient-centered.

As you navigate the busy weeks ahead, I hope you also find moments of rest and renewal. May this new season bring you strength, inspiration and joy in both your professional and personal life.

With gratitude and encouragement,

Tracey Quail Davidoff, MD, FCUCM, Editor-in-Chief
Urgent Caring, College of Urgent Care Medicine

Preventable Maternal Deaths: What Urgent Care Clinicians Need to Know

Maternal mortality remains a critical public health challenge in the United States. CDC data from 2021 reveal that most pregnancy-related deaths are preventable, yet they continue to occur at alarming rates. For Urgent Care clinicians – often the first point of contact for pregnant and postpartum patients – these findings underscore the importance of vigilance, timely intervention, and integrated care.

Urgent Care centers play a pivotal role in bridging gaps between routine prenatal and post-natal care and emergency services. Many patients present to Urgent Care with symptoms that may seem minor or non-pregnancy related, but can signal life-threatening complications. Understanding when and how these deaths occur, and their underlying causes, can help clinicians identify risks early and act decisively.

Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees (MMRC)

- In 2021:
    - 19.5% of pregnancy-related deaths occurred during pregnancy
    - 23.2% the day of delivery or within a week after delivery
    - 57.3% between 7 days to 1 year after pregnancy
- The leading cause of pregnancy-related deaths in 2021 was infection. Mental health conditions were the second leading cause of pregnancy-related deaths.
    - Substance use disorder was the specific MMRC-determined underlying cause of death in 63% of the pregnancy-related mental health deaths.
- 87% of pregnancy-related deaths were determined by MMRCs to be preventable.

Implication for Urgent Care Clinicians: Postpartum patients—especially beyond the first week—may present to Urgent Care with subtle signs of infection or mental health distress.

Ask all patients of childbearing age about recent pregnancy. Screen for infection aggressively and incorporate mental health and substance use assessments into all patients who are postpartum.

Pregnancy-Related Deaths Among American Indian (AI) or Alaska Native (AN) Women: Data from Maternal Mortality Review Committees

- In 2021, 13.5% of pregnancy-related deaths among AI/AN women occurred during pregnancy, 18.9% the day of delivery or within a week after delivery, and 67.5% between 7 days to 1 year after pregnancy.
- Mental health conditions were the leading cause of pregnancy-related deaths among AI/AN women in 2021. Infection was the second leading cause of pregnancy-related deaths.
- 100% of pregnancy-related deaths among AI/AN women were determined by MMRCs to be preventable.

Implication for Urgent Care Clinicians: Cultural competence and targeted outreach are essential for equity in care.

Action Steps for Urgent Care Clinicians

Early Recognition: Treat fever, pain, or abnormal discharge in postpartum patients as potential infection until ruled out.

Mental Health Screening: Incorporate brief mental health and substance use screening tools during visits.

Clear Referral Pathways: Establish rapid referral protocols to obstetric and behavioral health specialists.

Patient Education: Provide clear guidance on warning signs and when to seek immediate care.

With 87% of pregnancy-related deaths deemed preventable, Urgent Care clinicians have a unique opportunity to intervene. By integrating maternal health awareness into everyday practice, Urgent Care can become a critical safety net for mothers during pregnancy and the extended postpartum period.

Message brought to you by the College of Urgent Care Medicine and American College of Obstetricians and Gynecologists.

Case Report: Variable pain sensitivity in leg injuries in patients with ASD and learning difficulties

Abstract

Clinical Presentation: A 21-year-old male with a history of autism and learning disabilities presented to Urgent Care (UC) with right ankle pain after a twisting injury and fall he sustained whilst running. The patient was unable to weight bear (WB) on his ankle. Patient reported no head injury or loss of consciousness.

Physical Examination: On examination, there was no obvious swelling or bruising of the leg and no obvious bone deformities. Additionally, no ankle bone tenderness on palpitation and no fibula/patella/knee joint pain on palpitation. However, the patient was unable to perform a straight leg raise (SLR).

Case Resolution: X-ray of knee showed no abnormalities; however, the patient could only walk with the assistance of crutches and knee brace. The patient was discharged from UC and was referred to the Virtual Fracture Clinic (VFC) for further investigation. Patient returned 9 days after sustaining injury, presenting with swelling to the right thigh and still unable to WB on his right leg. Interestingly, the patient found it difficult to localize the pain he was experiencing. X-ray on the femur was performed revealing a displaced mid-shaft right femur fracture, requiring surgical intervention. The patient underwent an open reduction of the femur.

Conclusion: This case highlights awareness for clinicians being aware of injuries or other medical conditions which may go unnoticed in people with ASD or learning disabilities.

Key Words: Mid-Shaft Femur Fracture; Autism Spectrum Disorder; Variable Pain Sensitivity

Case Introduction

A 21-year-old male with a history of autism and learning disabilities presented to Urgent Care (UC) with right ankle pain after a twisting injury and fall he sustained whilst running to catch a bus. He stated that he had fallen onto the right side. The patient was unable to weight bear (WB) and reported no head injury or loss of consciousness. There was limited history gathered from the patient at the time of the initial consultation. At the time there was no corroborating history regarding his injury, and he attended UC alone. The clinician reviewing the patient had deemed the patient competent and compliant in understanding the instructions given.

His past medical history included being on the autistic spectrum, but no other physical medical conditions noted. He was not on any regular medication and had no known allergies. He lived with his mother and was independent of all daily activities.

Physical examination during the consultation revealed no obvious swelling or bruising of the leg and no obvious deformities in the lower limb. There was no tenderness with palpitation on the ankle (both medial and lateral malleolus), fibula head, patella, or the knee joint. Patient had good pedal pulses palpable and intact sensation in the extremities of the lower leg. Knee X-ray was performed (figure 1) and the results were a normal joint with no fractures and no effusion noted radiologically. However, the patient was unable to perform a straight leg raise (SLR) which often pointing to a significant injury. Unfortunately, the clinician did not perform a full hip examination but had a quick screen of the pelvis, which was non-tender on spring testing. An initial phone referral to the on-call orthopedic resident was

made due to there being some concerns about the patient's ability to fully weight bear and inability to perform the SLR test. The resident reviewed the films and provided advice over the phone for the patient to be referred to the virtual fracture clinic (VFC) for a secondary review. The patient was discharged home with a knee brace and crutches and referred for a follow up with VFC.

Virtual Fracture Clinic (VFC) Overview

The Virtual Fracture Clinic (VFC) is an orthopedic specialist-led service to which clinicians working in Urgent Care (UC) and Emergency Departments (ED) can refer patients within the hospital system. The VFC has established protocols that specify both inclusion and exclusion criteria for referrals. Exclusion criteria include open fractures, hip and spinal fractures, and certain fracture patterns in the knee, ankle, and wrist that may necessitate immediate intervention or manipulation.

The VFC system was originally introduced into the UK hospital system in response to the COVID-19 pandemic, providing a mechanism for ongoing orthopedic opinion and triage for acute orthopedic presentations. This model has since continued beyond the pandemic, offering a streamlined pathway for patient assessment and management.

Within the local VFC service, an orthopedic specialist reviews patients' imaging. Following this review, physiotherapists and occupational therapists may contact patients, parents, or caregivers by phone to ask additional questions. Based on this assessment, they may arrange for a formal in-person clinic review, refer patients directly to physiotherapy sessions, or discharge patients with written information regarding exercises and rehabilitation.

The VFC system has demonstrated effectiveness in managing orthopedic cases efficiently. The local service typically manages between 50 to 75 patients per day. Notably, approximately 85% of these patients do not require further orthopedic clinic review, highlighting the efficiency of the VFC in triaging and managing cases remotely.

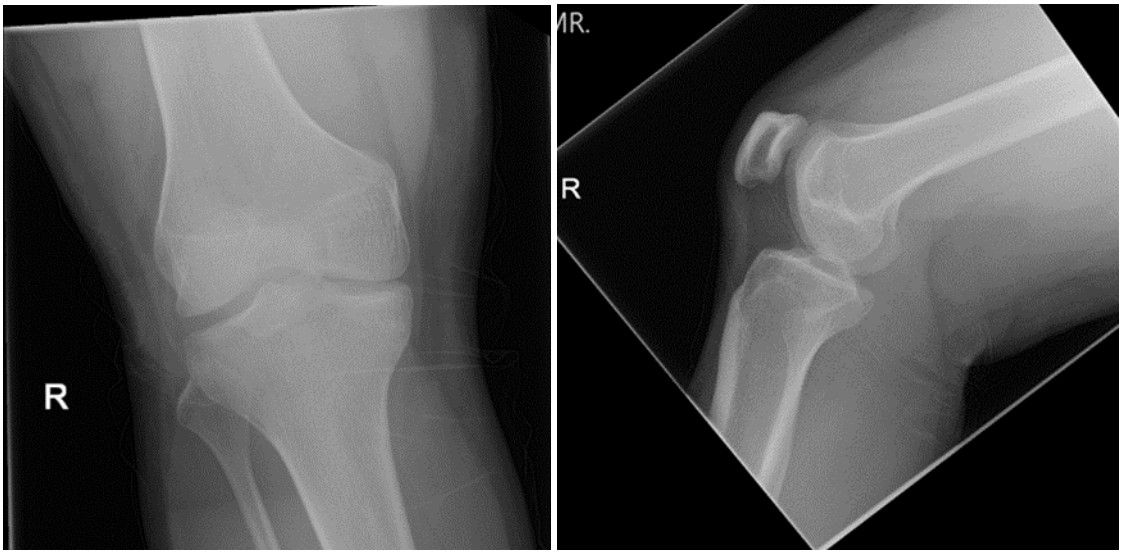

Figure 1. Initial Knee X-ray taken during the Initial Consultation

VFC Follow-Up for the Patient

Call from the VFC to his mother the next day noted that the patient was able to walk with difficulty around at home, and there were no other concerns raised. Based on the imaging reviewed in VFC by an orthopedic specialist and the consultation with mum the following day over the phone, he was treated as a potential knee strain and referred for physical therapy (PT) to aid his recovery.

9 days later, the patient returned to UC presenting with his mother, with swelling to the right thigh and still unable to WB or SLR on his right leg. The patient was also unable to localize the pain he was experiencing and there was no further history of trauma. He was sent for a right femur x-ray (figure 2), which revealed a displaced mid-shaft femur fracture. The patient was referred to the orthopedic team for review on the day. He was then admitted and taken to theatre for an open reduction of the femur surgical procedure. He recovered well from the procedure and has been making a slow recovery with PT.

Figure 2. X-rays of Femur taken during second visit

Differential Diagnosis and Decision-Making Process

Amongst the differential diagnosis that were considered at the time of the initial UC consultation were:

- Quadriceps/Patellar fracture
- Knee soft tissue injury
- Patella tendon rupture

While the patient was complaining of ankle pain, the clinical examination did not fit with any Ottawa Classification for the ankle, and therefore the ankle was not imaged. The clinician who conducted the initial consultation was concerned about the patient's inability to perform SLR and there requested the knee x-ray to rule out any knee pathology.

Discussion

The most common causes of femur fractures include high-energy trauma typically resulting from car accidents and falling from significant heights/standing, and sports injuries (1). Additionally, pathological fractures can occur due to underlying bone diseases such as osteoporosis or bone cancers (2).

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder that is defined clinically by impairment in communication, social interaction, and behavioral flexibility. ASD affects around one birth out of 150 worldwide (3). One of the most common symptoms of individuals with ASD across the spectrum are the atypical behavioral responses to sensory stimuli. Previous literature showed that over 96% of children with ASD report hyper- and hypo- sensitivities in multiple domains, including the vestibular, somatosensory, visual, auditory, olfactory, and gustatory system (4). In the case of pain, hyposensitivity means that ASD individuals may not perceive pain as acutely as others perceive, and

struggle with pain localization. Therefore, in this specific case, orthopedic and related care has the potential to present unique challenges for patients with ASD. This suggests that pain may be referred to areas away from the injury site and may present with a delayed onset after the injury.

Interestingly, individuals with ASD exhibit an increased susceptibility to fractures affecting the hip, forearm, and spine (5). Previous literature has shown a higher odds ratio for hip fractures in children and young adults (3–22 years) as well as older adults (23–50 years) with ASD than those without ASD (5). This may be due to reduced systemic bone mineral content and the thinning of cortical and trabecular bone structures including the hips; potentially caused by factors like low exercise activity and restrictive diets (6). Other reasons include commonly prescribed medications for ASD such as anticonvulsants and atypical antipsychotics, which may contribute to low BMD (6)

Taken together, this patient's case suggests that individuals with ASD, who often have hyposensitivity and a higher risk of hip fractures, may experience non-localized pain, highlighting the need for clinicians to exercise caution when assessing such patients. The management of femur fractures in patients with ASD depends on the individual's specific pain perception, which can vary widely across the spectrum. In this particular case, a femur fracture may present as a knee or ankle injury. This presents significant challenges for healthcare professionals in diagnosing and treating these injuries. Clinicians should exercise caution when assessing such patients, including ensuring that X-rays are taken of the correct anatomical region.

Preventative treatment for ASD patients to strengthen BMD includes alternative exercise activities with strategy to improve activity participation rates for ASD individuals. For example, a 2015 study found that children with ASD enjoyed swimming significantly more than children without ASD (7). Other treatments include sensory management and accommodation such as sensory diets, sensory stimulation approaches, and occupational therapists to help regulate sensory processing issues.

Learning Points

This case emphasizes the need for clinicians to exercise caution when assessing ASD patients presenting with limb injuries. Inspection and examination of the whole affected limb may be necessary to fully evaluate these patients, particularly due to potential lack of localization. This is particularly pertinent for UC clinicians ordering x-rays, as pain in ASD individuals may be non-localized or atypical, increasing the risk of misdiagnosis. Careful and thorough imaging of the suspected area, along with consideration of the patient's sensory and pain differences, is essential to ensure accurate diagnosis and effective treatment. Where necessary, corroborative history from a family member or friend who is familiar with the patient may help in identifying issues that may not be very apparent initially.

Process changes that have occurred as a result of this case include:

- Ensuring that a second clinician reviews patients that an initial consulting clinician has concerns over
    - This includes revisiting clinical history and documentation of a fresh physical examination
    - Requesting for orthopedic residents to review cases directly at the time of initial consultation, where there may be potential red flags involved – in this case the inability to weight bear and SLR.
- An escalation process has been instituted to ensure that clinicians get the support they need from either a senior UC clinician or from the ED.

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Pediatric Research Briefs: Clinical Pathway to Safely Reduce Urgent Care to ED Transfers of Patient with Croup

Wyly DR, Berg K, Melanson A, et. al. Using a Clinical Pathway to Safely Reduce Transfers and Admissions for Croup in the Urgent Care. Pediatr Emerg Care. 2025 Aug 1;41(8):635-640. doi: 10.1097/PEC.0000000000003396

This was a quality improvement study evaluating the changes made in the clinical pathway (CP) used by the 3 freestanding pediatric UCs associated with a large academic tertiary health system in a mid-western metropolitan area of the US. The CP used, recommend giving additional doses of racemic epinephrine (RE) in UC before transferring a patient and using shared decision-making with families on post-RE observation of their child at home or in a clinical setting. The authors noted a downward trend of UC patients who were transferred, prior to the CP revision. Following the CP revision, there was a sustained decrease of UC patients with groups who received RE and were transferred. There was no difference in median length of stay in UC and ED for patients who received RE during the pre-CP revision period compared with the post-CP revision.

Editor's Comments: The authors could not ascertain the frequency at which the CP was used in the 3 UCCs, therefore potentially incurring selection bias into their results. The UCCs also did not have standard triage algorithms and therefore it was not possible to account for the acuity of patients presenting or the severity of croup in patients attending. There is therefore the assumption by the authors that those patients receiving RE during their presentation would have had an audible stridor at the initial triage/consultation.

Most UC clinicians would probably not use RE in any initial treatment of croup unless it was a severe presentation with audible stridor. Therefore, using the CP suggested by the authors, may be overtreatment in the majority of cases. Although it does have some useful findings, the results of this study need to be interpreted with caution and UC clinicians are advised to follow their local treatment pathways and guidelines in managing patients presenting with croup.

Detecting Pediatric Suicide Risk – Screening and Risk Algorithms

Aseltine RH Jr, Sacco SJ, Rogers S, et. al. Screening and Risk Algorithms for Detecting Pediatric Suicide Risk in the Emergency Department. JAMA Netw Open. 2025 Sep 2;8(9):e2533505. doi: 10.1001/jamanetworkopen.2025.33505.

Suicide amongst young people is an ever-increasing issue, having increased by >60% over the 10-year period 2010-20, and is now the second most common cause of death amongst teenagers in the US. This was a retrospective cohort study of patients presenting to the ED of a pediatric medical center in the northeastern US. Universal suicide risk screening was conducted in the pediatric ED during the entire study period with the Ask Suicide-Screening Questions Survey (ASQ) and the Columbia–Brief Suicide Severity Rating Scale (CBSSRS) as the algorithm.

The authors noted that 19,653 patients visited the ED during the study period, of whom 495 (2.5%) were treated for a suicide attempt. 1587 patients (8.1%) had a positive screen result for moderate or high risk of suicide, of whom 181 (36.6%) had a subsequent suicide attempt, in contrast to 1406 (7.3%) of those who did not ($P < .001$). The algorithm labeled 45% more true-positive results (PPV, 0.16 vs 0.11), captured 38% more patients who attempted suicide (sensitivity, 0.51 vs 0.37), and did not differ from screening in its ability to identify patients at imminent risk of suicidal behavior.

Editor's Comments: From a UC perspective, this study carries some significance. UCCs are sometimes the initial point of contact for patients with unmet mental health needs, which may manifest as physical complaints such as wounds to the limbs. Recognizing the importance of early identification, UC clinicians play a pivotal role in detecting those patients who might benefit from further mental health screening, enabling timely assessment and appropriate intervention.

Adopting a holistic approach to patient care is vital, yet it can be easily overlooked in busy UC environments where clinicians face pressure to manage high patient volumes and maintain workflow efficiency. Despite these challenges, the quality of every patient-clinician interaction remains paramount. In UC settings, consultations are often brief and focused on rapid assessment and intervention. Nevertheless, the foundation of effective care lies in building a rapport based on trust and open communication between clinicians and patients. It is essential for clinicians to remember that even within limited timeframes, meaningful connections can be established. By practicing attentive listening, providing clear explanations, and demonstrating empathy, UC clinicians can positively impact patient experiences and outcomes. These interpersonal skills not only enhance patient satisfaction but also contribute to safer, more effective Urgent Care management.

Risk Factors for Invasive Group A Streptococcus in Children

van Kempen EB, Tulling AJ, von Asmuth EGJ, et. al. Risk Factors for Severe Pediatric Invasive Group A Streptococcal Disease. JAMA Netw Open. 2025 Aug 1;8(8):e2527717. doi: 10.1001/jamanetworkopen.2025.27717. PMID: 40828532; PMCID: PMC12365701.

Seasonal Group A Strep (GAS) infections are common and can vary in presentations from mild noninvasive illnesses, like pharyngitis, to severe, potentially fatal invasive infections, like meningitis and sepsis. Invasive GAS (iGAS) can be severe and debilitating and was noted to have a surge post COVID-19 lockdown restrictions being eased. This was a national (the Netherlands) multicentered cohort study to identify specific risk factors for developing iGAS. The authors found that children with GAS involving the pulmonary system (OR, 8.64; 95% CI, 5.50-13.55), or had developed necrotizing fasciitis (OR, 6.85; 95% CI, 2.18-21.53), streptococcal toxic shock syndrome (OR, 11.71; 95% CI, 4.39-31.18), and meningitis or encephalitis (OR, 4.38; 95% CI,4.39-31.18) were significantly associated with increased risk of severe disease (PICU admission and/or death). The authors also noted that since the spring of 2024, iGAS incidence has returned to baseline levels in the Netherlands.

Editor's Comments: The study was a mix model of retrospective clinical notes review of pre-COVID 19 cases and prospective observation of post-COVID 19 case reporting across the whole healthcare system, which had both strengths and weaknesses as a result of this methodology. The strengths being that data acquired were on a national level, however the retrospective analysis was reliant on the quality of recorded data available. It is hypothesized that in countries with stringent pandemic lockdowns, there may have been a resurgence of GAS infections, as suggested by the return to baseline case numbers following spring 2024. Nonetheless, for UC clinicians, vigilance continues to be the optimal approach, particularly as UC is now increasingly becoming a point of initial contact for many patients seeking care.

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Identification and Management of Delayed Hemothorax in the Urgent Care Setting: A Case Report

Shanth P Moses, FNP-BC, Michael Kim, DO, FCUCM

Introduction

Delayed hemothorax (dHTX) following a fall or injury in the elderly population is a rare but clinically significant condition associated with considerable morbidity. It often presents with subtle signs such as progressive dyspnea, cough, or functional decline developing days to weeks after seemingly minor blunt trauma. It is paramount for clinicians to maintain a high level of suspicion in cases involving minor trauma, even if the patient has a reduction in pain after initial injury. Notably, it is extremely rare to see dHTX occurring after minor thoracic trauma in the absence of rib fractures. The following case discusses an elderly male who was diagnosed with a dHTX after he was transferred to the hospital from the Urgent Care setting.

History

A 78-year-old male with a history of hypertension, type II diabetes mellitus, and permanent pacemaker/AICD presented to the Urgent Care with complaints of mild shortness of breath (SOB), fatigue, and anorexia following a fall that he sustained three weeks ago while he was on vacation in the Rocky Mountains. He states that he accidentally slipped and fell over a wooden chair onto his right side, injuring the right side of his ribs and right flank. He states that he noticed the fatigue and anorexia after he had a change in one of his medications for the management of his diabetes. He was previously on Januvia, which he stopped a month ago and has been on Ozempic for the past four weeks. His SOB is worsened with activity and better with rest. He noticed that the SOB has been increasing gradually in severity since the fall. He states that the fatigue has also become worse since then. He self-monitors his vital signs at home and noted an increase in his baseline heart rate from 65 BPM to over 100 BPM over the last few days. He also noted some palpitations over the last few days as well. He states that he no longer has any pain to his right ribs or flank. He otherwise denies fevers, body aches, chills, smoking history, history of COPD/asthma, chest pain, pain with breathing/movement, bruising, head strike, anticoagulation use, cough, hemoptysis, wheezing, syncope, dizziness, leg pain/swelling, nausea/vomiting/diarrhea, or hematuria.

Vital signs: Oral Temperature 99.6 F, Heart Rate 111 BPM, Blood Pressure: 146/81, Respiratory Rate: 19, Oxygen Saturation 96% on Room Air.

Physical exam: He appears to be in no acute distress, not cyanotic, had a regular but tachycardic heart exam with no murmurs, rubs, gallops, or S3 or S4, diminished lung sounds were auscultated in the right middle lobe and right lower lobe, no lower extremity edema or calf tenderness was noted.

Diagnostics: Finger stick glucose was 198, urinalysis revealed 80 ketones, 100 glucose, pH of 5.5, and specific gravity of 1.015, EKG revealed sinus tachycardia with occasional premature ventricular contractions. Unfortunately, chest radiography was unable to be obtained at that time in the Urgent Care.

Therapeutic Interventions and Outcome

The patient was transferred to the emergency department via ambulance for further evaluation. Initial chest x-ray in the emergency room (portable single view) revealed a large right pleural effusion as well as a right mid to lower lobe opacity suggestive of pneumonia, but no rib fractures. The chest x-ray was

followed up with a CT angiography chest with and without contrast which was negative for pulmonary embolism and rib fractures but revealed a large right pleural effusion with compressive atelectasis of the right middle and lower lobes. Hemoglobin/hematocrit and electrolytes were within normal range. He had a PT of 10.6 seconds, PTT of 6.3 seconds, and an INR of 1.0 on admission. His troponins, BNP, blood cultures, respiratory virus panel, and COVID antigen/PCR were negative. His D-Dimer was 1.64. His ejection fraction was normal at 60-65%.

A thoracentesis was performed the following day, with 800 mLs of sanguineous fluid removed, identifying the large pleural effusion as a large hemothorax. A pigtail catheter was inserted following the thoracentesis. Serial CT chest imaging showed significant decrease in the size of a small residual right sided pleural effusion; an adjacent infiltrate was also noted to the right lung base which was concerning for an infectious or inflammatory etiology. He was treated with empiric antibiotics for possible pneumonia, as he also subsequently developed an elevated white blood cell count and low-grade fevers. His chest tube was removed 4 days after insertion, and the post removal x-ray did not reveal any pneumothoraxes. The total drainage from the chest tube measured 1500 mLs. The patient was discharged home in stable condition on PO antibiotics after 5 days of hospital care.

Discussion

dHTX is a recognized but under-diagnosed complication observed in older adults following blunt thoracic trauma. Signs and symptoms may be seen days to weeks following injury; recent reports have observed cases occurring after 30 to 44 days following trauma.1 Blunt thoracic trauma is associated with mortality rates up to 25% in elderly patients, even with a low-energy mechanism of injury.1 Although no rib fractures were reported in this patient, the most common cause of a dHTX is rib fractures, which occur in 30-80% of patients who sustain thoracic trauma.[2] A clinical prediction score for dHTX was proposed by a propensity cohort study; the scoring is as follows: an age > 70 (2 points), an age range of 45–70 (1 point), any fracture in ribs 3–9 (2 points), and having three or more rib fractures (1 point); this tool found that 30.8% of 65 high–risk patients (score ≥ 4) have sustained a dHTX, and the tool had a high specificity (90.7%, 95% confidence interval 87.7%–93.1%) in this high–risk group.[3]

To avoid the complications associated with a delayed diagnosis of dHTX, it is crucial to consider close follow-up and repeat imaging in high-risk patients without symptoms.[4] The most common finding in chest radiography in patients with hemothoraces and pleural effusions is blunting of the costophrenic angle.[2] It is also important to note that there is a pitfall with chest x-rays, as 300-500 mLs of blood are required to observe blunting of the costophrenic angle; there may also be considerable alterations to the collection of fluid if intrapleural adhesions are present, as it will cause fluid or blood to occupy any available space.[2]

Urgent Care clinicians should maintain a high index of suspicion for dHTX in patients presenting with new or worsening chest pain, dyspnea, or tachycardia after chest trauma, even when the mechanism seems minor. This is particularly important in patients taking anticoagulants. Clinicians should also closely monitor elderly patients, those with multiple or displaced rib fractures, upper or middle rib fractures, and patients who had blunting of the costophrenic angles observed in their initial x-ray. Elderly patients who present with new or worsening dyspnea after minor thoracic trauma warrant the consideration of imaging or transfer to the emergency department. In high-risk patients who present with initially negative imaging findings or minimal symptoms, scheduled follow-up visits and repeat imaging can prevent a missed dHTX. Early detection and intervention are paramount in reducing complications and mortality in this high-risk population.

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Call Beyond the Visit: Identifying Sepsis Risk in Patients 65 years & Older with Fever and UTI Through an Urgent Care Callback Program

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SERUCA 2025 Urgent Care Conference Poster Competition Winner

Abstract

Background
Older adults aged 65 years and older presenting to Urgent Care with fever or urinary tract infection (UTI) are at increased risk for sepsis due to age-related immune decline, comorbidities, and atypical symptom presentation. Urgent Care frequently serves as the initial point of evaluation for these patients, creating an opportunity to identify early clinical signs of sepsis beyond the initial visit.

Objective
To evaluate the implementation and early outcomes of a structured Urgent Care callback program designed to identify early clinical signs of sepsis in patients aged 65 years and older following treatment for fever or UTI.

Methods

A proactive callback initiative was implemented at Novant Health Urgent Care beginning March 10, 2025. Patients aged 65 years and older treated for fever or UTI were contacted within 24–48 hours of their visit. Follow-up calls were conducted Monday through Friday by clinicians who performed focused clinical reassessments. Patients were advised to continue treatment, referred for in-person follow-up, or escalated to the emergency department when concerning findings were identified.

Results
Over an estimated three-month period, approximately 450–750 patients were contacted, with an average of 9–15 callbacks per business day. Seven patients were identified as demonstrating signs of clinical deterioration and were escalated to a higher level of care for further evaluation. These patients reported persistent or worsening symptoms despite initial treatment. No adverse events related to the callback process were identified. Fever and urinary tract infection were the most common diagnoses prompting follow-up.

Conclusion
A structured Urgent Care callback program provides an effective safety net for older adults treated for fever or UTI. By extending care beyond the initial visit, Urgent Care clinicians can identify early sepsis risk, support timely escalation of care, and enhance patient safety. This low-resource, scalable model highlights the role of Urgent Care in preventing adverse outcomes in high-risk populations.

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Tricks of the Trade: McGyver in Medicine

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All patients with eye complaints should have visual acuity documented on the chart. This includes simple conjunctivitis as well as more complicated illness and injuries to the eye. But what happens if the patient did not bring their glasses? How do you know if their terrible vision is baseline, or a result of their injury or illness?

In this situation, you can use a pinhole device to test their vision. Although formal devices for this purpose exist, simply poking a small hole in a piece of cardboard or thick paper suffices.

The pinhole improves visual acuity by allowing only central, paraxial light rays to enter the eye, thereby reducing the impact of refractive errors and higher-order aberrations. By limiting the aperture, the pinhole increases the depth of focus and minimizes the effects of defocus, astigmatism, and optical aberrations from irregular corneal surfaces or lens opacities. This results in a sharper retinal image for individuals with uncorrected refractive errors or irregular corneal astigmatism.

When visual acuity improves with a pinhole, it suggests that the underlying cause is primarily refractive error rather than organic pathology.

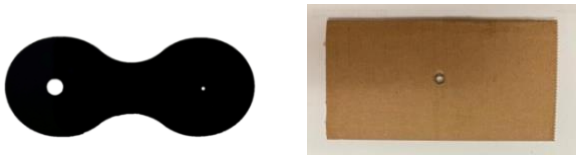

Figure 1. A commercially available and DIY pinhole device.

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High-Risk in the Water: Managing Waterborne Skin Injuries in Urgent Care

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Introduction

Urgent Care centers are frontline access points for patients with minor injuries, including lacerations and abrasions sustained during outdoor and recreational activities. When those wounds occur in aquatic environments—freshwater lakes, rivers, coastal beaches, or brackish lagoons—clinicians must maintain a heightened index of suspicion for serious infections. Waterborne pathogens can cause rapid-onset cellulitis, necrotizing soft tissue infections and systemic sepsis, often progressing within hours. Early recognition, appropriate wound management, and empiric antibiotics are essential to preventing morbidity and mortality.

Freshwater Wounds: The Threat of Aeromonas hydrophila

Freshwater exposure is frequently associated with *Aeromonas hydrophila*, a gram-negative bacillus ubiquitous in lakes, rivers and streams. Though often overlooked, *Aeromonas* can cause serious skin and soft tissue infections, especially in open wounds or punctures. Infections typically develop within 24 to 48 hours and can escalate to necrotizing fasciitis or sepsis, particularly in immunocompromised patients or those with delayed care.[1]

Clinical features often include:

- Rapidly spreading erythema and swelling
- Severe pain, often out of proportion to visible findings
- Purulent discharge or crepitus
- Fever or other systemic signs[1]

Urgent Care management includes:

- Thorough high-pressure irrigation with sterile saline or clean tap water
- Leaving the wound open to allow drainage and reduce infection risk
- Empiric antibiotics for moderate or high-risk wounds:[2]
- Ciprofloxacin or levofloxacin
- Alternatively: TMP-SMX plus doxycycline
- Tetanus prophylaxis as indicated

Wounds involving joints, tendons, or deep soft tissue planes warrant immediate referral to the emergency department for IV antibiotics and possible surgical consultation.

Saltwater Injuries: Vibrio vulnificus and Other Marine Pathogens

Saltwater and brackish water wounds carry a different risk profile, most notably due to *Vibrio vulnificus*, a halophilic, gram-negative bacterium found in warm coastal waters. This organism is capable of causing necrotizing skin infections and fulminant septicemia, particularly in patients with underlying liver disease, diabetes, iron overload, or immunosuppression. Mortality can exceed 50% in patients who become bacteremic.[3]

Clinical clues to *Vibrio* infection include:

- Sudden pain, erythema, and swelling
- Hemorrhagic bullae or dusky skin changes[4]
- Rapid progression to necrosis
- Fever, hypotension, or altered mental status

Other marine pathogens, such as *Pseudomonas aeruginosa, Shewanella*, and *E. coli*, may also be present in saltwater wounds, but *Vibrio* poses the greatest immediate danger.

Empiric treatment for saltwater-exposed wounds:[2]

- Doxycycline plus a third-generation cephalosporin (e.g., ceftriaxone)
- OR Doxycycline plus a fluoroquinolone (e.g., ciprofloxacin or levofloxacin)
- Copious irrigation and avoidance of primary closure
- Tetanus booster when appropriate

Any patient presenting with systemic signs, worsening pain, or risk factors for severe infection should be transferred to the ED without delay.

The Role of Urgent Care: Recognizing and Acting Quickly

While Urgent Care is not the final destination for most severe waterborne wound infections, it plays a pivotal role in early detection and timely referral. Prompt irrigation, appropriate empiric antibiotics, and clear patient instructions can make a substantial difference in outcomes.

Refer to the ED if any of the following are present:

- Deep tissue involvement, tendon or joint exposure
- Rapidly worsening symptoms within 24–48 hours
- Systemic signs such as fever, tachycardia, or hypotension
- High-risk comorbidities (cirrhosis, diabetes, immunosuppression)[3]
- Concerns for necrotizing fasciitis

Tetanus Prophylaxis: Still Essential

As with all open injuries, tetanus status must be assessed. The CDC recommends Tdap or Td boosters every 10 years, or sooner if the wound is contaminated and the last booster was over 5 years ago. Waterborne wounds are considered tetanus-prone, especially if heavily contaminated or associated with devitalized tissue.[5]

Conclusion

Although most aquatic wounds will heal without complication, the consequences of missing an early waterborne infection can be severe. Urgent Care clinicians must remain vigilant. History of water exposure should prompt appropriate wound management, empiric antibiotic selection and thoughtful decisions about closure and referral.

Knowing when to treat and when to transfer can be lifesaving.

Key Takeaways for Urgent Care

- Always ask about water exposure when evaluating open wounds.
- Aeromonas hydrophila is the key freshwater pathogen; treat with fluoroquinolones or TMP-SMX + doxycycline.[1][2]
- Vibrio vulnificus is the most dangerous saltwater organism; treat with doxycycline plus ceftriaxone or a fluoroquinolone.[2][3]
- Avoid primary closure of most aquatic wounds.[4]
- Update tetanus vaccination when indicated.[5]
- Refer promptly if infection is rapidly progressing, deep, or in a high-risk host.
- A recheck in 24-48 hours is good practice and may help identify those not responding to treatment

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Resisting Inappropriate Antibiotics: How Judicious Use of Molecular Testing Helps Clinicians Prevent Overprescription

Keywords: Antibiotic Resistance, Prescribing, RT-PCR Testing, Outcomes, Ambulatory and Acute Care, Infectious Disease

Introduction

Antimicrobial resistance (AMR) is an escalating global health crisis with severe morbidity and mortality implications. Each year, 2.8 million antibiotic-resistant infections resulting in over 35,000 deaths occur in the United States.1 When infections caused by Clostridioides difficile (C. diff) are included, this burden exceeds 3 million illnesses and 48,000 deaths.1 Forecasts show that by 2050, an estimated 1.91 million deaths attributable to AMR and 8.22 million deaths associated with AMR could occur globally. 2 Antibiotic overuse accelerates the emergence of multidrug-resistant organisms, including methicillin-resistant Staphylococcus aureus (MRSA), extended-spectrum beta-lactamase (ESBL)-producing bacteria, and vancomycin-resistant enterococci (VRE).3 These pathogens pose significant threats to individual patients and public health by increasing healthcare costs and complicating infection control efforts. Additionally, excessive antibiotic use raises the risk of adverse drug reactions and opportunistic infections, such as C. difficile-associated diarrhea. These alarming statistics loom large over all clinical settings. Challenges persist in finding ways to influence this upward trend positively during clinician-patient encounters.

A significant contributor to antibiotic resistance is the overprescription of antibiotics in outpatient, urgent, and emergency care settings–often driven by diagnostic uncertainty and patient demand for a prescription. These high-volume care settings are particularly susceptible to excessive and inappropriate antibiotic prescribing. Addressing this issue requires a paradigm shift in the use of diagnostics to optimize treatment decisions. Molecular testing, particularly nucleic acid amplification testing (NAAT), has revolutionized diagnostics across various infectious diseases. Among these, reverse-transcription polymerase chain reaction (RT-PCR) testing presents a promising avenue by enabling precise pathogen identification within a shorter time frame (i.e., next day vs 2+ days). This article explores the ramifications of antibiotic overprescription, the benefits of next-day RT-PCR testing, and practical strategies, such as a shared decision-making discussion of test results, for integrating this technology into ambulatory and acute care settings.

The Problem: Antibiotic Overprescription Drives Resistance

The World Health Organization (WHO) classifies antibiotics into three groups: Access (narrow spectrum, lower risk of resistance), Watch (higher potential for developing resistance), and Reserve (last resort for treating confirmed or multidrug-resistant organisms), according to their potential to foster resistance. To mitigate resistance, the WHO recommends that no more than 40% of prescribed antibiotics belong to the Watch and Reserve categories.4 Encouragingly, in 2022, Access to antibiotics comprised 70.5% of outpatient antibiotic prescriptions in the U.S.4 However, nearly 30% were in the Watch and Reserve categories, significantly contributing to resistance.4

Outpatient settings are responsible for most antibiotic prescriptions and their associated costs. In 2022, over 236 million antibiotic prescriptions were issued in these settings, accounting for 80-90% of all prescriptions and over 60% of total U.S. antibiotic expenditures.5 Alarmingly, one in three of these

prescriptions was deemed unnecessary.5,6 This overuse burdens the healthcare system, increases costs, and negatively impacts patient outcomes.

Several factors contribute to antibiotic overprescription in outpatient, urgent, and emergency care settings. Diagnostic uncertainty plays a pivotal role, especially in differentiating bacterial from viral infections. Variability in prescribing patterns among clinicians for common infectious complaints further complicates the issue.7 Patient expectations for antibiotics exert additional pressure on clinicians.8 Finally, time constraints and high patient volumes limit the feasibility of comprehensive diagnostic evaluations.

Reducing Uncertainty: RT-PCR Testing with Rapid Turnaround

Reverse transcriptase (RT) polymerase chain reaction (PCR) testing is a molecular diagnostic technique that amplifies pathogen-specific DNA sequences,9,10 RNA-based targets enable the detection of any organism type with high precision, regardless of its genome structure.11 Adoption of RT-PCR testing during the COVID-19 pandemic demonstrated its potential to streamline care, reduce costs, and enhance patient and clinician satisfaction. 12,13 Initially, PCR testing required send-outs that could take days to weeks to report. Current advances are making the turnaround time much shorter, where RT-PCR can deliver results within minutes to hours, when at the point-of-care, or as part of a send-out solution. The test insights can inform clinical decision-making and shared decision-making with the patient on appropriate interventions.

Integrating RT-PCR testing into clinical workflows offers several advantages. Multiplex PCR-based panels demonstrate high diagnostic accuracy for detecting viral and bacterial respiratory pathogens, with sensitivities and specificities exceeding 90%.14-16 In comparison, point-of-care antigen testing is limited by lower sensitivity, particularly for influenza A and RSV, of only 44 to 74%.17, 18,19 In addition, multiplex PCR-based panels allow syndrome-based (e.g., site-specific) test ordering for patients with a high pre-test probability of infection, particularly when empiric decision-making or point-of-care testing proves inconclusive.14-16

RT-PCR testing20,21 It is particularly informative for patients presenting with:

- Worsening symptoms or recent antibiotic treatment
- Comorbidities increase the risk from lower respiratory tract infections (LRTIs)
- Risk factors for polymicrobial infections
- Severe clinical presentations requiring additional diagnostic insights (e.g., chest X-ray or emergency department referral)

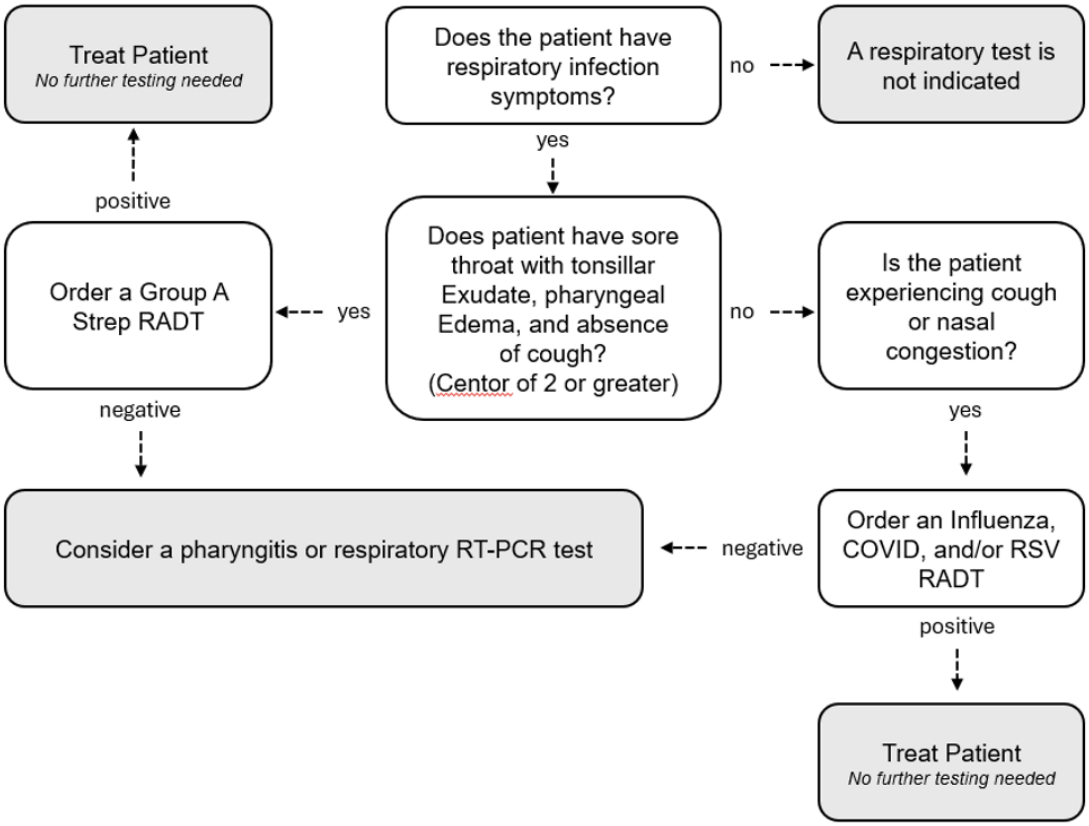
Multiplex, syndromic RT-PCR testing (including both viral and bacterial pathogens) significantly reduces diagnostic uncertainty, enabling clinicians to deliver precise results and guide more informed treatment decisions. For example, a bronchitis panel for a patient presenting with cough, moderate temperature elevation, and mucopurulent sputum of multiple days duration might include bacterial: Haemophilus influenzae, Moraxella catarrhalis, Streptococcus pneumoniae; atypical bacteria: Bordetella pertussis, parapertussis, bronchiseptica, Chlamydia pneumoniae, Mycoplasma pneumoniae and viral targets: Adenovirus, Coronaviruses (229E, HKU1, NL63, & OC43), COVID-19 Coronavirus (SARS-CoV-2), Enterovirus D68, Human metapneumovirus, Influenza virus A, B, Parainfluenza virus (types 1, 2, 3, 4), Respiratory syncytial virus, Rhinovirus/Enterovirus. This approach strengthens antibiotic stewardship by curtailing broad-spectrum antibiotic use and, in many cases, eliminating the need for antibiotics.22

Challenges and Considerations with RT-PCR Testing

Many bacterial and fungal organisms may be present at low levels without causing symptoms.23,24 However, these organisms are often opportunistic and can overgrow in response to both host and environmental factors, becoming pathogenic. 25 Understanding when a detected pathogen is clinically relevant is critical to avoiding unnecessary treatment. Since potentially pathogenic organisms can be found among the normal flora of the respiratory tract, and high-sensitivity PCR testing will identify them, limiting testing to patients with relevant symptoms and clinical history can help ensure clinical relevance of test results. That said, the inclusion of semi-quantification of microbial load can differentiate the clinical and pathologic significance of organisms (colonization versus actual infection that warrants treatment), 24 26,27 and aid clinicians in interpreting test results for treatment decisions. Yet, clinical presentation remains a foundational determinant of whether the pathogen is commensal. Finally, multiplex RT-PCR panel testing with curated, relevant panels promotes results specific to the pathogens tested. The risk—albeit small—of not testing for relevant pathogens does have the potential for false negative results. In contrast, traditional culture methods can grow many organisms present in a specimen; however, results are not always structured for clinical relevance and are limited by organism viability, growth conditions, and incubation time. Importantly, not all clinically significant pathogens are reliably recovered on routine culture. Some fastidious organisms require specialized media, anaerobic conditions, or prolonged incubation. For example, Fusobacterium necrophorum—a recognized cause of symptomatic pharyngitis and peritonsillar infection in adolescents and adults—does not grow on routine aerobic throat culture and may be missed without targeted anaerobic techniques or molecular testing.28

The integration of RT-PCR testing has proven beneficial across outpatient and emergency care settings. Studies indicate that RT-PCR testing for respiratory infections has reduced unnecessary antibiotic prescriptions, lowered healthcare utilization and decreased associated costs for patients and providers.29-33 These findings underscore RT-PCR's potential to enhance patient outcomes while supporting antimicrobial stewardship.

Figure 1. A practical example of RT-PCR integration34 can be observed in a multi-state Urgent Care provider’s workflow, structured as follows:



This tiered approach optimizes resource utilization while ensuring accurate diagnosis and treatment.

A Vision for a Better Future

To fully leverage RT-PCR testing, outpatient care settings must address practical implementation challenges, including clinician training and integration into clinical workflows.

Effective antibiotic stewardship requires equipping clinicians with strategies for evidence-based prescribing and patient education. Clinicians must effectively communicate the risks of unnecessary antibiotic use and the role of molecular diagnostics in guiding treatment. Communicating the role of molecular diagnostics and risks of unnecessary antibiotic use may be particularly relevant in pediatric care, where testing may not always lead to improved antibiotic prescribing.35,36

Addressing antibiotic resistance requires collaboration between healthcare organizations, diagnostic companies, and policymakers. Investments in RT-PCR infrastructure and improving access to testing can facilitate broader adoption in outpatient settings. By incorporating appropriate RT-PCR testing into routine outpatient and Urgent Care workflows, clinicians have an additional tool, leveraged in a shared decision-making conversation with the patient, to curb antibiotic overprescription, slow resistance progression, and enhance public health outcomes.

Conclusion

Antibiotic resistance remains a pressing challenge in outpatient and acute care settings, fueled by overprescription and diagnostic uncertainty. Rapid polymerase chain reaction testing offers a transformative solution by enabling precise and timely pathogen identification to inform evidence-based therapy. Through the integration of this technology into clinical workflows, clinician and patient education, and cross-sector collaboration, healthcare systems can strengthen antimicrobial stewardship

and mitigate resistance. Clinicians should advocate for and implement RT-PCR testing to safeguard the effectiveness of antibiotics for future generations.

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From our Colleagues at Evidence Based Urgent Care

Clinical Pearls on Asymptomatic Hypertension, Laboratory testing and Motor Vehicle Collision-Related Injuries

- The 2025 American Heart Association/American College of Cardiology Guideline defines *normal blood pressure* for adults aged ≥18 years as <120/80 mm Hg; above this cut-off, blood pressure ranges are defined as *elevated, stage 1 hypertension,* and *stage 2 hypertension*. (Jones DW, 2025)
- The diagnosis of hypertension should be based on the mean of ≥2 properly measured blood pressure readings obtained on each of at least 2 office visits. Do not overreact to a single high value, as this could be the "white coat effect." (Jones DW, 2025)
- To recognize hypertensive emergencies, remember the BARKH acronym – brain, arteries, retina, kidney, heart – to remember target-organ systems at risk. (Rossi GP, 2021)
- Patients with severe hypertension (>180/120 mm Hg) and no signs of end-organ damage can typically be discharged with close outpatient follow-up; they do not require ED transfer or immediate blood pressure reduction. (AJ, 2019; Jones DW, 2025)
- Lifestyle modification counseling is essential. Reinforce regular physical activity, weight loss (if overweight or obese), moderation of alcohol intake, reduced dietary sodium, increased dietary potassium (unless contraindicated), stress management, and adoption of the DASH diet. (Whelton PK, 2002)

Clinical Pearls: Laboratory Testing

- While molecular testing is more sensitive, antigen testing is more cost effective and likely to be available as a point-of-care test. (Elrobaa IH, 2024)
- Multiplex panels may reduce unnecessary antibiotic use. Similarly, be aware of clinical situations where normal bacterial flora is colonized, and antibiotic treatment is not indicated. (Dumkow LE, 2021)
- Clinicians should carefully consider whether the test result will change clinical management and/or improve clinical outcomes.

Clinical Pearls: Motor Vehicle Collision-Related Injuries

- The mechanism of injury is a key determinant in predicting injury patterns and guiding clinical decisions. (Surgeons, 2022)
- High-risk mechanisms, older age, pregnancy, and anticoagulation use should prompt careful evaluation and lower thresholds for ED or trauma center referral.
- Nearly a quarter of patients aged ≥65 years with cervical spine fractures are asymptomatic, which is one reason why the Canadian C-Spine Rule recommends cervical spine imaging for this patient population, regardless of the severity of the injury or mechanism. (Stiell IG, 2003)
- Nonsteroidal anti-inflammatory drugs and acetaminophen are first-line therapies for pain management in MVC injuries. Muscle relaxants are not recommended, as they show limited clinical benefit. (Busse JW, 2020) (Hsu JR, 2019) (Qaseem A, 2020)

- When a patient clearly meets criteria for ED or trauma evaluation, prioritize immediate EMS transport rather than performing on-site diagnostic testing and imaging that may delay definitive care.

Read more in-depth information on these topics and more from EB Medicine at www.ebmedicine.net

Lac Hack from The Laceration Course

The Power of the Cart

Efficiency starts before the patient walks in. One of the simplest upgrades to your laceration workflow is a portable procedure cart. Stock it with everything you may need: gloves, irrigation gear, suture kits, various closure options, anesthetics, and even I&D supplies. This eliminates the time drain of hunting down supplies mid-procedure. A mobile, fully stocked cart reduces stress, interruptions, and setup time—allowing you to stay in the room and focus on the repair.

From EB Medicine's FOAMed Blog (Always Free!)

- Urgentology Podcast: The editor-in-chief, Dr. Tracey Davidoff, and editorial board member, Dr. Joe Toscano, of *Evidence-Based Urgent Care* discuss the evaluation and management of various chief complaints in the Urgent Care setting.
- Brain Teasers: Test your knowledge with common Urgent Care case presentations.

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From our Colleagues at Hippo Education

Auricular Hematomas in Urgent Care

Brett Murray, MD

When I was younger, one of my older relatives gave me some advice: “Check someone’s ears before picking a fight, and if they have cauliflower ear… run away.” I’d learn later that he meant those ears belonged to wrestlers or martial artists—people who’ve taken (and given) a lot of hits. In other words: someone I stood no chance against.

While it’s a funny memory, it highlights something important. Left untreated, auricular hematomas can lead to significant complications like cauliflower ear and severe infections. In Urgent Care, we’re perfectly positioned to prevent this disfigurement—and the complications that can come with it—by confidently diagnosing and draining auricular hematomas.

Recognizing the Hematoma

An auricular hematoma usually forms after a blunt shearing trauma to the ear, commonly seen in contact sports like wrestling or boxing. When the perichondrium separates from the cartilage, blood pools in that space. The result? A swollen, distorted ear—usually on the anterior pinna. The lobule is typically spared, since it lacks cartilage.

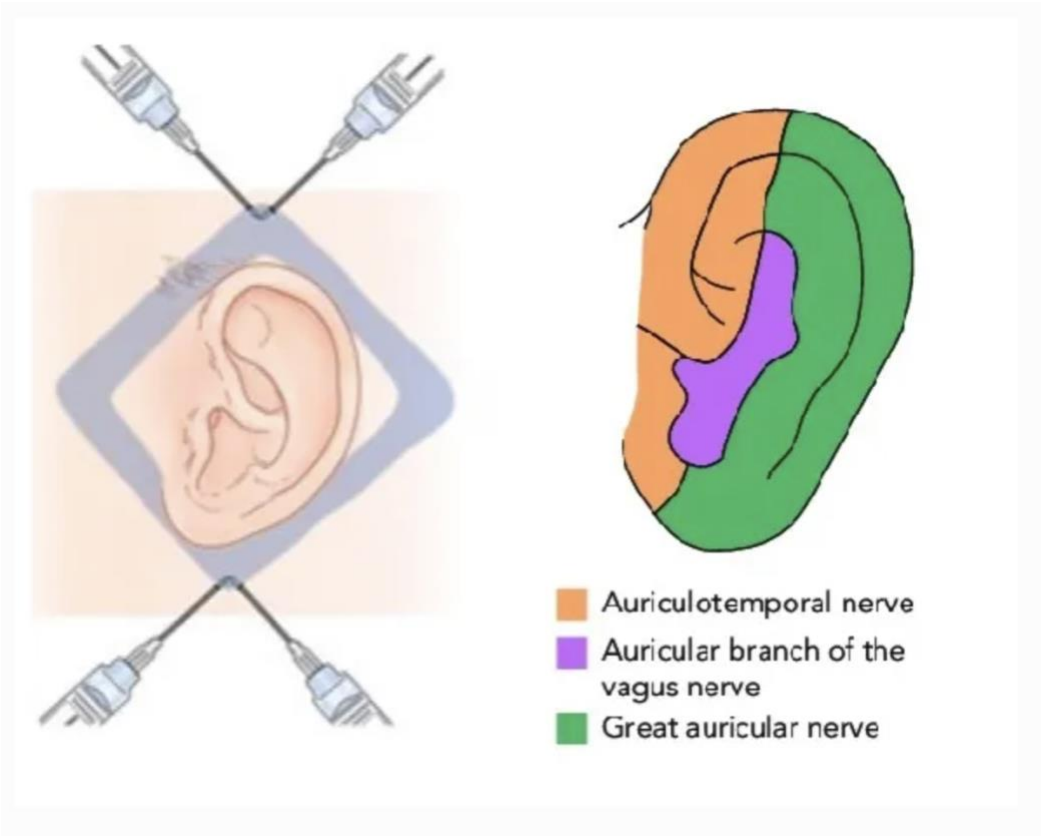
While this is a clinical diagnosis, always keep your differential broad. If there's fever, fluctuance, or signs of infection, think perichondritis or abscess. No hearing loss, ear drainage or systemic symptoms? You’re probably looking at a straightforward hematoma.

When to Drain (and When to Refer)

Timing is everything. If the injury is older than seven days, refer to ENT. Clotted blood and granulation tissue make drainage less effective, and specialist intervention is needed. But for fresh hematomas (ideally within 48 hours), Urgent Care is a great setting for intervention, assuming there are no red flags like necrosis, infection or associated facial trauma.

From our colleagues at Hippo Education

The Drainage Game Plan
First, block the pain. An auricular nerve block is quick, safe, and very effective.



Then decide how to drain:

- **Needle aspiration** works for hematomas <2 cm and <48 hours old.
- **Incision and drainage** are preferred for larger or slightly older hematomas.
- **IV catheter drainage** offers continuous decompression and can be paired with a bolster dressing.

Whichever method you choose, the real key is compression. After drainage, apply a pressure dressing that reapproximates the perichondrium to the cartilage to prevent re-accumulation. Think dental rolls and through-and-through sutures—or whatever materials you happen to have closest to you that day that will get the job done.

Don't Forget Aftercare

Current recommendations are for these patients to receive a 7-10 day course of prophylactic antibiotics. In adults, you should be reaching for fluoroquinolones to target *Pseudomonas,* and in kids, we are using amoxicillin-clavulanic acid to cover for skin flora. Prophylactic fluoroquinolones are not recommended in the pediatric population, given their side effect profile, but make sure you educate the family on signs of developing perichondritis. Recommend a follow-up with ENT in 24–48 hours and enforce a two-week break from contact sports. Oh, and remind them to use proper headgear to prevent future injuries.

When to Send to the ED

If there's concern for severe perichondritis that warrants admission, abscess or *significant* laceration involving cartilage, send them to the ED. The same goes for hematomas related to high-impact trauma, where underlying injuries could be missed.

Don't Fear the Ear

Auricular hematomas are a "can't miss" diagnosis given their potential for disfiguring outcomes, but luckily, we can easily manage them in the acute care setting. Timely drainage not only spares your patient cosmetic complications but also prevents infection and necrosis. Don't fear the ear. With the right tools and timing, this is a win for Urgent Care.

Check out more great topics like this on Hippo's Urgent Care Review and Perspectives podcast here!

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Urgent Updates

01/29

Cervical Artery Dissection Diagnosed Following Chiropractic Cervical Manipulation: A STOP-CAD Subanalysis

About 1 in 20 cases of cervical artery dissection (CeAD) in the registry reported antecedent manipulation; these manipulation-associated cases occurred more often in younger patients and females**,** were more often vertebral dissections, and were linked with neck pain compared with non-manipulation cases. ***Clinical implications:*** this suggests that while the *absolute risk* of CeAD post-manipulation appears very low, clinicians should be aware of the distinct demographic and clinical features associated with these cases and maintain a high index of suspicion for CeAD in younger women presenting with neck pain after manipulation. **Full Access:** PubMed

Cardamyst Nasal Spray Now Available for Self-Treatment of PSVT Episodes

CardaMyst (etripamil) nasal spray has received FDA approval as the first self-administered, rapid-acting treatment for acute episodes of paroxysmal supraventricular tachycardia (PSVT) in adults. The approval was supported by robust evidence from the Phase 3 RAPID trial showing significantly faster conversion to normal sinus rhythm with CardaMyst vs placebo and a shortened median time to conversion. ***Clinical implications:*** This novel calcium channel blocker provides patients the ability to treat unpredictable PSVT episodes outside hospital settings, potentially reducing emergency department visits and anxiety associated with recurrent arrhythmias. Clinicians must counsel patients on proper use and monitor for side effects like nasal discomfort and dizziness. **Full Access:** MPR

The CDC's Respiratory Virus Activity Levels

The CDC reports current surveillance data on COVID-19, influenza, and RSV spread nationally and by state using multiple indicators, including emergency department visits, test positivity rates, and wastewater viral activity. It uses the acute respiratory illness (ARI) metric — which captures a broad range of respiratory illness presentations — to classify activity into five levels from Very Low to Very High, giving a more complete picture than older influenza-only metrics. ***Clinical implications:*** these data help clinicians anticipate surges in respiratory illnesses. They also underscore the value of broad surveillance (including ED and wastewater data) in detecting shifts in respiratory pathogen transmission that could affect patient care and infection control practices. **Full Access:** CDC

Evaluation of Risk Factors for Failed Seroconversion in The Management of Potential Lyssavirus Exposures

The study analyzed 181 potential lyssavirus (rabies) exposures in Southeast Queensland to identify factors linked with failed seroconversion after rabies post-exposure prophylaxis (PEP). Incorrect rabies vaccine administration site and giving vaccine into the same arm within 72 hours of rabies immunoglobulin were strongly associated with non-therapeutic antibody responses. Older age (>65 years) was also independently linked to a higher risk of failed seroconversion. ***Clinical implications:*** Ensuring correct vaccine site and timing relative to immunoglobulin is crucial to optimize seroconversion and avoid PEP failure. In cases of administration error, immediate repeat vaccination should be considered without waiting for serology. Enhanced vigilance may be warranted in older patients. **Full Access:** IDSA

02/05

ECDC Issues Guidance on Doxycycline for STI Prevention

Clinical data show doxy-PEP can significantly lower chlamydia and syphilis incidence in high-risk groups when taken within 24–72 hours after condomless sex, but it is unlikely to reduce gonorrhea where tetracycline resistance is common. Due to concerns about accelerating antimicrobial resistance in STI pathogens and bystander bacteria, ECDC does not endorse population-wide use and advises clinicians to base use on individual risk and integrate it into comprehensive STI prevention strategies. ***Clinical implications:*** Clinicians should consider doxy-PEP on a case-by-case basis for patients at highest risk (e.g., MSM with prior STIs), counsel about limited effect on gonorrhea and potential for resistance, and ensure linkage with regular testing, vaccination, and safer-sex counseling. **Full Access:** ECDC

Intranasal Treatments for Children with Sleep-Disordered Breathing. The MIST+ Randomized Clinical Trial

The MIST+ randomized clinical trial evaluated whether 6 weeks of intranasal steroid was more effective than saline in treating persistent obstructive sleep-disordered breathing (OSDB) symptoms in children aged 3–12 years after an initial saline run-in. Both continued saline and intranasal steroid treatment led to symptom resolution in about one-third of children, with no significant difference between groups. ***Clinical implications:*** A course of intranasal saline alone may be an effective first-line therapy for pediatric OSDB before specialist referral or surgical evaluation, potentially reducing unnecessary use of steroids and lowering surgical waitlist burden. **Full Access:** JAMA

Oral Ivermectin Versus 5% Permethrin Cream to Treat Children and Adults with Classic Scabies: Multicenter, Assessor Blinded, Cluster Randomized Clinical Trial

The study found that oral ivermectin did not demonstrate non-inferiority to permethrin for achieving clinical cure by day 28, whereas 5% permethrin was statistically superior in cure rates at the cluster and individual levels. Adverse skin events were relatively similar between groups. The trial included patients from multiple French hospitals and was designed to assess both index cases and their household contacts. ***Clinical implications:*** These results support continuing to use topical 5% permethrin cream as the preferred first-line therapy for classic scabies, given its superior effectiveness in this trial. Oral ivermectin may still have a role in selected cases (e.g., permethrin intolerance or logistical challenges with topical therapy), but clinicians should be cautious about substituting ivermectin as routine first-line treatment without further evidence. Full Access: BMJ

Safety And Immunogenicity of Panchol, A Single-Dose Live-Attenuated Oral Cholera Vaccine: Results from A Phase 1a, Double-Blind, Randomized, Placebo-Controlled Trial

The article reports phase 1 clinical trial results for a new *single-dose, live-attenuated oral cholera vaccine* showing favorable safety and immunogenicity in healthy adult volunteers. The vaccine elicited strong immune responses against *Vibrio cholerae* with mostly mild, transient side effects and demonstrated genomic stability. These early results support further testing in cholera-endemic regions to assess efficacy and public health impact. ***Clinical implications:*** If subsequent trials confirm efficacy, PanChol could simplify cholera prevention programs with a *single oral dose*, improving uptake and protection in high-risk populations, especially in resource-limited settings with frequent outbreaks. Full Access: The Lancet

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