

# URGENT CARING

*A Peer Reviewed Publication from the College of Urgent Care Medicine*

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## A Message from the CUCM President, Chris Chao, MD

### Antibiotic Awareness Week 2023 Concludes & the Urgent Care Convention Registration Opens

Dear Urgent Care clinicians,

On behalf of the College of Urgent Care Medicine, I wish you a joyous holiday season. As 2023 comes to an end, I would like to reflect on one of the College's initiatives: Antibiotic Stewardship.

November 17-24 was U.S. Antibiotic Awareness Week (USAAW). We extend a thank-you to everyone who submitted stories of how you are supporting Antibiotic Stewardship, as well as those of you who submitted photos of you and your team wearing purple to support CDC's "Go Purple" campaign. For those who missed Guillermo (Memo) Sanchez, PA-C and Patrick Dolan, MD's webinar to kick off U.S. Antibiotic Awareness Week, here some highlights:

- While the majority of outpatient antibiotics prescribed are medically necessary, at least 28% of antibiotic prescriptions may be unnecessary.
- Antibiotic Stewardship is more than not prescribing antibiotics when not medically indicated. It includes choosing the effective antibiotics and avoiding ineffective ones (for example, the use of azithromycin for sinus infections), and using the antibiotic for the appropriate duration.
- High prescribers of antibiotics are often not aware of their prescribing patterns and the fact that they are on the high end.
- A comprehensive institutional approach to Antibiotic Stewardship does work!

For 2024, I challenge you to reflect on your antibiotic prescribing practices, to review updated best-practice guidelines and to review your region's antibiograms. You may be surprised by some of the recent changes and recommendations!

In this issue, Bernie Short, MD, FAAFP, FCUCM<sup>1</sup>, President of SERUCA (Southeast Regional Urgent Care Association) shares an op-ed on the use of "provider." Moving forward, the College has endorsed addressing MDs, DOs, PAs, and NPs as Urgent Care clinicians. As you may have noticed, this is how we have opened this letter.

Finally, registration for the Urgent Care Convention is [now open](#)! I look forward to seeing you in person at Caesars Forum April 13 through the 17.

Sincerely,



Christopher Chao, MD  
President College of Urgent Care Medicine

## From the Editors-in-Chief



This edition of Urgent Caring marks the last edition of 2023. The end of the year is always a time to reflect on where we have been and where we are going. This past year, we have had some great contributions from authors not just within Urgent Care, but specialists in cardiology, oral maxillofacial surgery, coding, and more. We went from scrambling to getting enough articles for publication to having articles arrive unsolicited. We had just enough work for our three-person staff, and now we are looking for help! Our authors and peer reviewers were a small core group of active members, which we have now more than doubled.



Next year we are looking forward to continuing to provide much more of the same high-quality education. We are hoping to include more radiology, photo diagnosis, and more case reports and case reviews. We will continue to give you tips on coding, EKG interpretations, tricks of the trade, and other meaningful content. We will also continue to deliver information on relevant topics in the news, editorials, and information about our members to keep you informed. We are developing an information kit for potential authors that will be available on our website in the near future.

To those who have contributed in the past: Thank you. We urge you to continue to contribute in the future. Do you know someone who has a great case or has recently reviewed an interesting topic? Please encourage them to write it up and submit it. We are open to any articles relevant to Urgent Care. The education of our members is how we ensure high quality Urgent Care and how we mold those for the future to take our place. The landscape of Urgent Care is changing, and we need to grow and change with it. It's our commitment to you, our readers, to continue to provide high-quality educational materials as part of your CUCM member benefits. Please let us know if there are any specific subjects you are interested in or any areas you would like to see more coverage on.

We hope you will have a happy and healthy holiday season. Take the time to learn a little by reading this edition of Urgent Caring. You will find among others, a great case report on aortic dissection, a review of Valley fever, some EKG and coding tips, a best practice on sore throat, and of course, ongoing valuable contributions from EB Medicine, the UC MAX podcast and Hippo Education.

And don't forget to claim your free CME!

Thank you to our fantastic peer reviewers whose invaluable insights and constructive feedback significantly contributed to enhancing the quality of this issue and ensuring the publication of high-caliber content! Their expertise and dedication have played a pivotal role in maintaining the excellence of Urgent Caring. For this issue, we thank Dr. Toscano, Dr. McNeeley, Dr. Temple, and Dr. Aziz. If you are interested in reviewing submissions for Urgent Caring, please send us an email.

Tracey Q. Davidoff, MD, FCUCM

Cesar Mora Jaramillo, MD, FAAFP, FCUCM

## Editorials and Opinions—I am NOT a Provider

**J. Bernie Short, MD, FAAFP, BCUCM, FCUCM**



According to my mother, since I was five years old, all I ever wanted was to be a doctor. Admittedly, there was some confusion about whether I wanted to be an animal doctor or a people doctor. I just knew that I grew up with an urge to help others who were ill or in pain. Shows like *Ben Casey* (1961) and *Marcus Welby, M.D.* (1969) fueled my passion and guided me to the MD path, a career in which I have thrived for over 40 years. I did not go to medical school to become a provider.

All MDs, DOs, NPs, DNPs, and PAs have a special relationship with their patients. The relationship between a patient and their doctor is different and more historical. A physician only achieves the designation after years of rigorous training with tremendous sacrifice and commitment. That path typically takes 11-15 years to become a fully licensed doctor (MD/DO). In contrast, there is no doctorate PA program, and a NP can receive their doctorate degree (DNP) completely online. So where is the equivalency?

In the 1930s the Nazi Party devalued the role of Jewish doctors in German society. Beginning with female pediatricians, all Jewish physicians were redesignated as ehandler (provider) instead of Arzt (doctor), the first documented demeaning of physicians as providers in modern history.

The term “provider” became more pervasive after the U.S. government first used the term in the 1965 Social Security Amendments that established Medicare and Medicaid. This resulted in the contagion of the term and the adaptation of “provider.” This ultimately led to medicine being thought of as a business and implies that the relationship between a patient and physician is a commercial transaction.

A provider is someone who supports a family, while a doctor is considered a person skilled in the healing arts and is licensed to practice medicine because they have an advanced degree. PAs and NPs also have advanced degrees and are skilled in practicing medicine. They are also demeaned by being called providers. None of us are providers.

When it comes to patient care, being called a doctor, NP, or PA rather than a provider is a sign of respect and acknowledges a certain level of expertise. Being called a provider confuses everyone and dehumanizes every NP, DNP, PA and physician. The term insidiously and innocuously erodes our professional identity.

In 2006, the Southern California Permanente Medical Group passed a resolution that prohibits the use of the word “provider” to describe physicians. The AAFP and the AMA House of Delegates have similarly published position statements that view the term provider as not being equivalent to a physician. CUCM has also recently chosen to discourage using provider, instead opting to use “Urgent Care clinician.”

We are not providers. We are NPs, DNPs, PAs and physicians. The term “provider” demeans all of us and fails to reflect the different paths taken, all of which are honorable and deserve proper terminology, otherwise we are all diminished. Our title is powerful. It is important. It is time for all healthcare professionals to reclaim our titles and our power.

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## The Future of Urgent Care Medicine, an Interview with ChatGPT

**Corey Amann, MD, MBA**  
**Tracey Q. Davidoff, MD, FCUCM**

We interviewed ChatGPT about several issues of interest to Urgent Care clinicians and operators. Although Urgent Caring does not generally condone any educational content generated by ChatGPT for clinical learning, when soliciting feedback in the context of this purpose, we found the answers to the following questions worth sharing.

**Dr. Amann: Does the future of Urgent Care look good?**

**ChatGPT:** The future of Urgent Care appears to be promising. Urgent Care has become increasingly popular over the past few years, as it offers convenient, walk-in medical services for non-life-threatening illnesses and injuries. This model of care has proven to be successful in providing quick and accessible medical care to patients.

Additionally, the COVID-19 pandemic has increased the demand for Urgent Care services, as many people are hesitant to visit hospital emergency rooms for fear of exposure to the virus. Urgent Care centers have been able to step in and fill this gap, providing vital medical services to patients with COVID-19 symptoms or other illnesses.

Furthermore, the Urgent Care industry is continually evolving, with new technologies and innovative practices being developed to improve patient care and outcomes. For example, telemedicine and virtual visits have become more prevalent in Urgent Care centers, allowing patients to receive medical care from the comfort of their own homes.

Overall, the future of Urgent Care looks bright, with continued growth and expansion expected in the coming years. However, as with any healthcare industry, there may be challenges and uncertainties to face, such as changes in healthcare policies and regulations, staffing shortages, and fluctuations in patient demand.

**Dr. Davidoff: Is Urgent Care experiencing a degradation in services compared to those previously provided?**

**ChatGPT:** According to some sources, Urgent Care is experiencing a degradation in the services previously offered, especially for high acuity patients who need more complex procedures. Some of the possible reasons for this degradation are:

- Changes in reimbursement policies that favor efficiency over quality
- Increased demand for COVID-19 testing and care overwhelmed Urgent Care centers

- Replacement of emergency medicine physicians with advanced practice providers who have less training and skills

This degradation can have negative impacts on the quality and accessibility of health care, as well as the satisfaction and well-being of the Urgent Care workforce. .

**Dr. Amann: What services should Urgent Care add in the future?**

**ChatGPT:** Urgent Care centers have traditionally focused on providing treatment for non-life-threatening illnesses and injuries, such as colds, flu, fractures, and minor cuts. However, as the Urgent Care industry continues to evolve, there are several services that these centers could consider adding in the future to expand their offerings and improve patient care. Here are some examples:

1. Chronic disease management: Urgent Care centers could provide services to manage chronic diseases such as diabetes, asthma, and hypertension. This could include monitoring and managing medications, providing education on lifestyle modifications, and offering regular check-ups and screenings.
2. Mental health services: Urgent Care centers could offer mental health services such as counseling, therapy, and medication management for conditions such as anxiety and depression.
3. Specialty care: Urgent Care centers could expand their services to offer specialty care, such as dermatology or orthopedics, on a limited basis. This could involve partnering with local specialists to offer consultations and follow-up care.
4. Preventive care: Urgent Care centers could provide preventive care services, such as immunizations, cancer screenings, and routine physical exams.
5. Telemedicine: Urgent Care centers could expand their telemedicine offerings to provide virtual consultations and follow-up care for patients with non-emergency medical needs.

By expanding their services, Urgent Care centers could provide patients with a more comprehensive range of care, improve patient outcomes, and help reduce the burden on emergency departments.

**Dr. Davidoff: Will retail care outpace Urgent Care in the future?**

**ChatGPT:** Predicting the future of healthcare can be challenging, and it depends on various factors, including changes in healthcare policy, advancements in technology and shifts in patient preferences. Whether retail care will outpace Urgent Care in the future is uncertain, but I can provide some considerations:

1. Convenience and Accessibility: Retail clinics are often praised for their convenience and accessibility. They are typically located in retail stores, making it easy for patients to access basic healthcare services. If this trend continues and more retail clinics open, they may attract a growing number of patients.
2. Scope of Services: Urgent Care centers typically offer a wider range of services than retail clinics. Urgent Care centers can handle more complex medical issues and injuries. If Urgent Care centers expand their services or become more convenient, they might remain popular.
3. Cost and Insurance: The cost of care and insurance coverage can significantly influence where patients seek care. If one option becomes more cost-effective or if insurance policies preferentially cover one type of care, it could impact the balance between retail and Urgent Care.

4. **Patient Preferences:** Some patients prefer the familiarity and convenience of retail clinics for routine and minor health issues, while others may prefer the comprehensive care provided by Urgent Care centers or primary care physicians. Patient preferences will play a significant role in the balance between these options.
5. **Regulatory Changes:** Changes in healthcare regulations and policies can impact the growth and accessibility of both retail and Urgent Care. For example, regulations that favor one type of facility over the other could shift the balance.
6. **Technological Advances:** The integration of telemedicine and digital health solutions may alter the landscape of healthcare delivery, blurring the lines between retail and Urgent Care. Both types of facilities might incorporate these technologies to serve patients more effectively.

In summary, it's difficult to definitively predict whether retail care will outpace Urgent Care in the future. The outcome will depend on various factors, and the balance between the two may vary by region and over time. The key is to ensure that healthcare remains accessible, affordable, and of high quality, regardless of the type of facility providing it.

#### **Dr. Davidoff: Why is there a shortage of radiology technologists?**

**ChatGPT:** Radiology technologists are professionals who perform diagnostic imaging procedures, such as x-rays, CT scans, MRI scans, and ultrasound scans. They are essential for the diagnosis and treatment of various diseases and conditions.

According to some sources, there is a shortage of radiology technologists in the U.S. and other parts of the world. Some of the possible reasons for this shortage are:

- **Aging population:** As the population ages, the demand for imaging services increases, as older people tend to have more health problems that require imaging.
- **Retirement of experienced technologists:** Many radiology technologists are approaching retirement age, and there are not enough new graduates to replace them.
- **Educational challenges:** The number of radiology technologist training programs and slots has not kept up with the demand, and some programs have closed due to financial or accreditation issues.
- **COVID-19 pandemic:** [The pandemic has affected the supply and demand of radiology technologists in various ways, such as reducing the enrollment and graduation of students, increasing the workload and burnout of staff, and shifting the career outlook for many imaging professionals.](#)

The shortage of radiology technologists can have negative impacts on the quality and accessibility of health care, as well as the satisfaction and well-being of the imaging workforce. [Therefore, it is important to address this issue by implementing strategies such as increasing the funding and support for radiology technologist education, improving the recruitment and retention of qualified staff, and enhancing the efficiency and productivity of imaging services.](#)

#### **Dr. Davidoff: How can Urgent Care operators prevent burnout in their employees?**

**ChatGPT:** Preventing burnout among employees in Urgent Care settings is crucial for maintaining a high level of patient care and staff satisfaction. Here are several strategies that Urgent Care operators can implement to help prevent burnout.

- **Manage Workload:**
  - Ensure that staffing levels are appropriate to handle patient volumes, preventing excessive workloads and overtime.
  - Implement efficient scheduling practices to distribute work evenly and allow for sufficient breaks.
- **Provide Adequate Training and Resources:**
  - Invest in training and professional development programs to ensure that employees have the skills and knowledge necessary to perform their roles effectively.
  - Equip staff with the necessary tools and resources to streamline their work, such as electronic health records and communication platforms.
- **Support Teamwork:**
  - Encourage a collaborative and supportive work environment where team members can rely on each other for help and share responsibilities.
- **Promote Work-Life Balance:**
  - Encourage employees to take their scheduled breaks and vacations to recharge.
  - Offer flexible scheduling options, when possible, to accommodate employees' personal needs.
- **Recognition and Appreciation:**
  - Acknowledge and appreciate the hard work of your staff through regular feedback and recognition programs.
  - Celebrate achievements and milestones within the team.
- **Address Emotional Stress:**
  - Provide access to mental health resources and counseling for employees who may be dealing with the emotional toll of Urgent Care work.
  - Create a culture where seeking help for mental health concerns is encouraged and stigma-free.
- **Offer Employee Assistance Programs (EAPs):**
  - EAPs can provide employees with resources and counseling to help with personal and work-related challenges.
- **Empower Decision-Making:**
  - Involve employees in decision-making processes and value their input, which can lead to a greater sense of ownership and control over their work.
- **Manage Expectations:**
  - Set realistic expectations for patient load and wait times, considering the staff's capacity to maintain quality care.
- **Promote Physical Wellness:**
  - Encourage physical wellness by offering wellness programs, gym access, or activities that promote healthy lifestyles.
- **Continuous Feedback and Improvement:**
  - Regularly seek feedback from employees about their work environment and processes, and make necessary improvements based on their input.
- **Resilience Training:**
  - Provide training in stress management and resilience to help employees cope with the demands of Urgent Care work.

- Workplace Safety:
  - Ensure that the workplace is safe, secure, and free from unnecessary stressors.

Preventing burnout in an Urgent Care setting is an ongoing process that requires a commitment to employee well-being. By implementing these strategies and creating a supportive, healthy work environment, Urgent Care operators can help reduce the risk of burnout and improve overall staff satisfaction and performance.

## **Case Study #1: A Case of Aortic Dissection in Urgent Care**

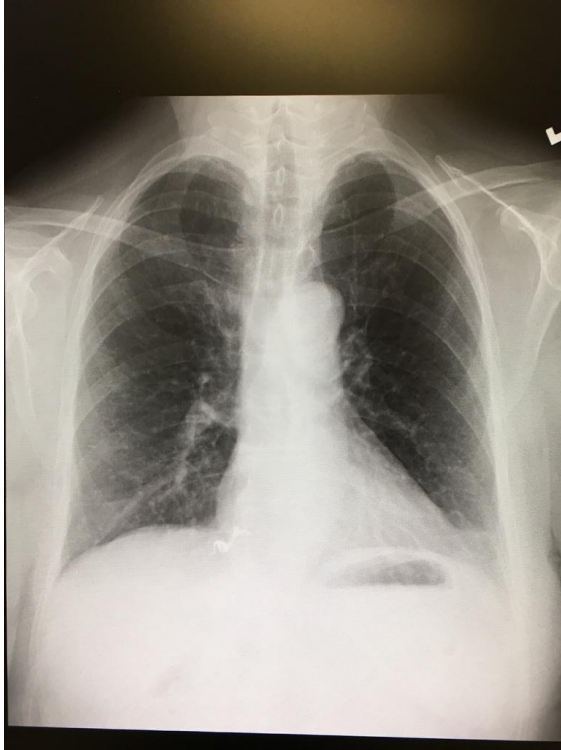
### **Pete Baker, PA-C**

A 32-year-old female presents with six months of atypical chest pain. She describes the discomfort as a mild, random sensation radiating left to right across her mid-sternal region. This occurs with and without exertion and lasts several minutes with days between episodes. The patient admitted no other neurovascular or cardiopulmonary symptoms, and she denies pertinent medical history. Her reasoning for waiting six months for care was a fear of doctor's offices during the COVID-19 pandemic. Her thought was that she may have strained a muscle in her chest running after her two lively children.

A healthy young mother, who has taken care of herself, was an alert female who was a good historian of her concern. Her past medical history included two healthy pregnancies resulting in two live births. She has no first-degree family history of early cardiac disease, and she takes no medications. No outward signs of illness could be gleaned from her appearance.

She was alert and awake, normotensive, normothermic, non-tachycardic, and non-diaphoretic. Her skin was without cyanosis or pallor. She denied active chest pain at the time of the exam. The physical exam revealed a faint systolic murmur heard over the aortic region. She reports no knowledge of a murmur. The remainder of the exam was normal.

Her chest X-ray showed a minimally tortuous aorta with a normal cardiac silhouette and no lung infiltration. Her electrocardiogram showed sinus rhythm without ectopy or ST-segment deviation. She remained complaint-free through the entire visit.



An echocardiogram was recommended to investigate the newly found heart murmur, as well as a follow-up with her family doctor and a referral to cardiology. Detailed emergency room precautions were given. The patient was discharged and directed to the hospital's imaging center where a same day echocardiogram had been arranged.

The same day, the trans-thoracic echocardiogram indicated an ascending aortic dissection which was verified by the radiologist. The patient was then emergently sent to the ED. Cardiothoracic surgery was performed, repairing the aortic defect. The patient did well post-operatively and had no complications.

Photo Courtesy of Tracey Davidoff, MD, FCUCM

## Discussion

Aortic dissection (AD) is the separation of the layers within the aorta as the artery exits the myocardium. Microtears in the intima of the artery begin this cascade. These tears are formed from sheering forces created by high pulsatile pressures of oxygenated blood pummeling through the aortic valve. This constant pounding, called the water-hammer effect, causes mechanical trauma, and allows a false lumen to form between the layers of the aorta. The intima and media begin to separate creating this false lumen. The buildup of blood and pressure slowly, or in some cases rapidly, expands this false lumen. Acute AD occurring within two weeks is exceptionally lethal. Chronic AD lasting over two weeks has a better, if yet still guarded prognosis. The damaged area and false lumen will eventually result in life-threatening disease.

Sudden onset of severe chest pain with a ripping tearing sensation extending to the mid-scapular region is a hallmark symptom.<sup>1</sup> However, some cases provide no such red flag, and a high index of suspicion is needed. 38% of AD cases are misdiagnosed.<sup>1</sup> Approximately 75% of AD cases are discovered in patients aged 40 to 70, with peak incidence in ages 50 through 65.<sup>1</sup>

AD may be acquired, genetic, hereditary, or traumatic. Acquired causes can be linked to coronary artery disease, hypertension, and hyperlipidemia.<sup>2</sup> Genetic conditions include Ehlers-Danlos, Marfan and Turner syndromes.<sup>3</sup> Hereditary factors include a first-degree relative with a history of thoracic dissection of their aorta.<sup>2</sup> Traumatic deceleration forces, such as high-speed automobile crashes also contribute to AD.<sup>2</sup>

## Demographics

Thankfully, AD is an uncommon condition with only 21 cases per one million persons in the United States (2019). However, it comes with a high mortality rate of 40%, making this a cannot miss diagnosis.<sup>2,3</sup> In acute AD this mortality rate increases 1% per hour, making a rapid time to diagnosis and treatment imperative.<sup>1</sup>

AD strikes men more than women, however women are usually diagnosed at a later age leading to a greater mortality rate.<sup>1</sup> The elderly and those of non-Hispanic African heritage are at greatest risk of succumbing to this condition.<sup>2</sup>

Patients with connective tissue disorders such as Ehlers-Danlos or Marfan syndrome are especially vulnerable to AD. The endothelial cells making up the intima are far more easily damaged in connective tissue diseases. Structural instability of the aortic wall combined with increased intima wall tension can lead to AD.<sup>1</sup> Hypertensive patients also are at higher risk for developing AD.<sup>2</sup> The increased systolic pressure of oxygenated blood being jettisoned from the left ventricle eventually takes its toll on the delicate lining of the aorta increasing risk for a tear.

## Classification

There are two classification systems for AD. In the DeBakey system, the origin of the damaged intima is differentiated. DeBakey type I involves the ascending aorta with progression towards the aortic arch.<sup>1</sup> DeBakey type II involves only the descending aorta moving distally towards the thoracic aorta.<sup>1</sup> This system is a method to determine the precise location of the intima damage, thus allowing a cardiothoracic surgeon to make an informed decision pertaining to the repair of the AD.

In the Stanford system, type A is the ascending aorta and type B the descending aorta.<sup>1</sup> Stanford also delineates non-A and non-B (involving the aortic arch).<sup>1</sup> Type A can be further classified by entry and malperfusion (TEM) perimeters. Type A, B, non-A/B is noted, then 0 for non-visible entry in the lumen, 1 for ascending aorta, 2 for aortic arch, 3 for descending aorta.<sup>3</sup> Malperfusion is 0 for none, 1 for coronary, 2 for supra-aortic vessels, 3 for visceral/renal/lower extremities.<sup>3</sup> In addition, a + if malperfusion is clinically evident or a - if only a radiological finding.

Complications of DeBakey I (Stanford A) can include a retrograde progression of the AD, leading to prolapse of the aortic valve with aortic regurgitation, coronary artery obstruction and pericardial effusion.<sup>3</sup> This type of AD is more severe and life threatening, often requiring immediate intervention. DeBakey type II (Stanford B) complications consist of malperfusion of the spinal cord, gastrointestinal tract, kidneys and lower extremities.<sup>3</sup> Due to their chronic nature a more conservative non-surgical approach is indicated.

## Diagnosis

The most common symptom in AD is acute chest pain that radiates to the abdomen or back.<sup>1</sup> A ripping/tearing sensation in the thoracic/abdominal region is a pertinent descriptor from patients when describing their pain.<sup>1</sup> Chest pain is noted as less likely in DeBakey II (Stanford B), where pain would be more diffuse over the back and abdomen.<sup>1</sup> Conversely, 15% of DeBakey I (Stanford A) present with syncope.<sup>1</sup> Regardless of presenting symptoms, a high index of suspicion is needed when approaching the atypical chest pain patient with a possible AD.

A computerized tomography (CT) scan of the chest is the gold standard imaging for AD.<sup>1</sup> Magnetic resonance angiography (MRA) is more sensitive and specific, however, may take longer and is limited by

patient allergies and renal function.<sup>1</sup> Trans-thoracic echocardiogram (TTE) should be reserved for stable out-patient investigation of atypical chest pain or used in the emergency setting only while awaiting a CT scan of the chest.<sup>1</sup> Blood work such as CRP and D-dimer are used prognostically (normal results equal a good outcome; abnormal results a poor outcome).<sup>1</sup>

## **Treatment**

In DeBakey I (Stanford A), due to the close proximity to the myocardium, emergent surgery is indicated.<sup>1</sup> This is due to the anatomical change as AD progresses retrograde into the heart, affecting the aortic valve.<sup>1</sup> Surgical goals are to obliterate the false lumen created by the dissection and placement of synthetic graft material to strengthen the intima.<sup>1</sup> DeBakey II (Stanford B) treatment aims are completely different. Goals are centered around reducing blood pressure, lowering pulse and controlling pain.<sup>1</sup> Beta blockers and calcium channel blockers are the mainstay pharmacological treatment for these patients.<sup>1</sup>

## **Conclusion**

Fortunately, aortic dissection is an uncommon event in the United States. However, due to the high rate of mortality, early detection is key in preventing death in these patients. All patients presenting with chest pain should have AD in the differential diagnosis. With 2,000 new cases every year, aortic dissection is one condition that cannot be missed.

### References

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<sup>2</sup> Nazir S, Ariss R, Minhas A, et al. Demographic and regional trends of mortality in patients with aortic dissection in the United States 1999 to 2019. *JAMA* 2022 Apr 5;11(7):e024533. doi 10.1161/JAHA.121.024533. <https://www.ahajournals.org/doi/10.1161/JAMA.121.024533>.

<sup>3</sup> Bach D. Review on aortic dissection: key points. *American College of Cardiology* Jan 2023. <https://www.acc.org/Latest-in-cardiology/ten-points-to-remember/2023/01/03/20/08/acute-aortic-dissection>.

## Case Study #2: Pediatric Foreign Body Ingestion

Cesar Mora Jaramillo, MD FAAFP FCUCM

### Case



Accompanied by her mother 18 hours after swallowing a foreign body, a 5-year-old female presents to Urgent Care. The incident was not witnessed, but the patient told her mother that she had swallowed a small “decorative piece” while she was at her grandmother’s house. The patient complained of the feeling of something being stuck in her throat right after ingesting the foreign body. This was resolved after drinking water. Mother and patient deny any other symptoms including dysphagia, cough, shortness of breath, wheezing, chest pain, abdominal pain or vomiting. The last bowel movement was 4-5 hours ago, with normal stool consistency, and no foreign body was noticed. The mother brought a sample of the foreign body that the patient ingested, which appears to be a plastic decorative piece of about 2 cm (See

image 1). No pertinent past medical history or surgical history.

### Image 1

Suspected foreign body ingested – plastic resin decorative stone



### Vital Signs

Blood pressure 88/58, Pulse 97, Respiratory rate 18, Oxygen saturation 98%, Temp 37.2 °C (99 °F), Weight 18.3 kg (40 lb 4 oz)

### Physical Exam

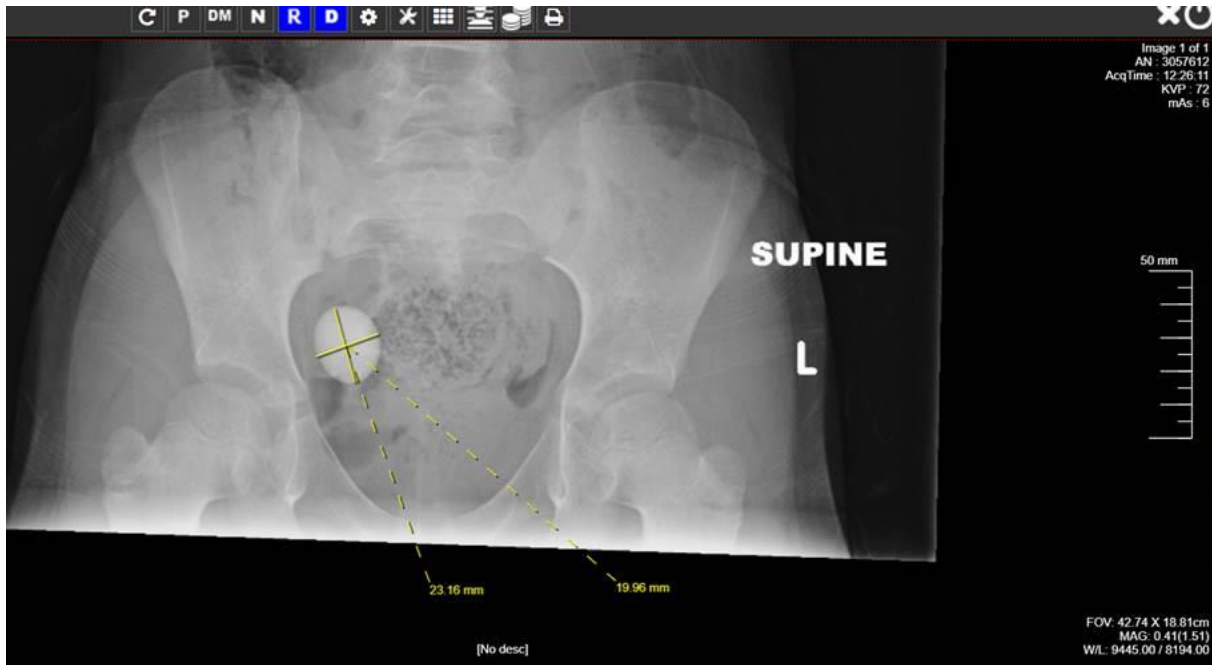
Patient is not in acute distress or toxic appearing. Child is well developed. No drooling observed. Oropharynx exam is normal Cardiovascular: Rate and rhythm: Normal rate and regular rhythm. Pulmonary: Pulmonary effort is normal. No respiratory distress or nasal flaring. Breath sounds: Normal breath sounds. No stridor. No rhonchi. No crackles, No wheezing. No intercostal or subcostal

retractions. Abdominal: Bowel sounds are normal. There is no distension. Abdomen is soft. There is no mass. There is no abdominal tenderness. There is no guarding or rebounding.

### **Imaging**

Neck and chest radiograph were normal.

Abdominal X-ray showed a non-obstructive bowel pattern, no dilated loops. Oval radiodense foreign body projecting in the R L Q measuring 2.3 cm x 2cm.



### **Discussion**

Children swallowing foreign bodies is a very common chief complaint. The most common foreign body ingestion in United States are coins.<sup>1</sup> The populations with higher risk for foreign body ingestion are preschoolers, adolescent boys and children with mental health issues. Children aged one to three years account for the majority (61.9%) of all ingestions.<sup>2</sup>

Most of the foreign body ingested will pass through the GI tract without any complications. In some cases, the foreign body can be too large to pass, or it can adhere or injure (sharp objects) the GI mucosa, or cause chemical/burn injury (button battery or a medication patch) requiring immediate intervention.<sup>1</sup>

### **Urgent Care evaluation**

The initial step after a foreign body ingestion is to promptly assess the airway. A complete history and physical examination are crucial with specific attention to clinical presentation, details about the material ingested (type, size, number, and shape), time lapse since ingestion and last meal.<sup>1,2</sup> Clinicians must obtain a detailed past medical history including preexisting GI tract abnormalities (strictures, fistulas, diverticula, or functional abnormalities), previous GI surgeries which increases the risk of complications.

3

Symptoms may vary based on the age of the patient and the anatomic area involved. Patients may present with throat, neck and chest pain, foreign body sensation, drooling, gagging, vomiting, irritability or refusing to eat. Cough, hematemesis, abdominal pain, or hematochezia/melena can be present. Some symptoms might be exacerbated when swallowing.<sup>1-4</sup>

Plain radiographs are normally the initial step (anteroposterior and lateral) of the neck, chest and abdomen).<sup>1-4</sup>

Most children with low-risk ingestions may be simply observed. Symptomatic patients may require more advanced imaging, such as contrast-enhanced radiography or MRI or endoscopy.<sup>1</sup> Unexpected foreign bodies can be found in radiographs when evaluating non-specific symptoms (cough, fevers, weight loss).

Any symptomatic patient should be referred to the ER, especially if the airway is compromised or esophageal/intestinal obstruction is suspected.<sup>1,4</sup> Certain objects in the distal esophagus can be monitored to assess passage into the stomach, but foreign bodies found in the esophagus should be referred for endoscopic removal.<sup>4</sup>

When discharging a patient with normal GI tract after a low-risk foreign body ingestion that is expected to pass without complications, patients and caregivers should be instructed on the signs and symptoms of subsequent potential complications.

#### **Pearls for the Urgent Care Clinician**<sup>1,2,3,4</sup>:

- Many foreign body ingestions by children are unwitnessed.
- The airway should be assessed immediately.
- Think of a foreign body when a patient complains of throat, neck and chest pain or a foreign body sensation and symptoms exacerbate when swallowing.
- Younger children may drool, gag, vomit, or refuse food.
- Children with suspected button/disc battery ingestion should be managed urgently.
- A button/disc battery has a two-layer appearance when seen on end or a circle-within-a-circle appearance when seen front-to-back.
- Coins, magnets, or sharp objects in the esophagus should be removed within 2 hours in symptomatic children and within 24 hours in asymptomatic children.
- Sharp, long or large and wide objects located in the esophagus or stomach require endoscopic removal.
- Coins >23.5 mm (such as the quarter) may have difficulty passing into the stomach and are a higher risk for obstruction.
- Most glass fragments are visible on a radiograph.
- Radiolucent objects (large pieces of meat or plastic) may not be visible on radiographs, but edges or irregularities may still be noticeable.
- A lateral radiograph of the neck/chest is suggested to confirm the absence of a tracheal foreign body when a presumed esophageal foreign body is visualized on the AP view.
- Foreign bodies that contain nickel may cause systemic signs and symptoms in patients with nickel sensitivity (rash and pruritus).
- ER referral should be considered for any symptomatic patient. Urgent evaluation for objects impacted in esophagus and intestines.
- Medical management, such as emetics or laxatives, after foreign body ingestion is not recommended.

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2. Orsagh-Yentis D, McAdams RJ, Roberts KJ, McKenzie LB. Foreign-body ingestions of young children treated in US emergency departments: 1995–2015. *American Academy of Pediatrics*. May 1, 2019. Accessed November 27, 2023. <https://doi.org/10.1542/peds.2018-1988>
3. Lee JH. Foreign Body Ingestion in Children. *Clin Endosc*. 2018 Mar;51(2):129-136. doi: 10.5946/ce.2018.039. Epub 2018 Mar 30. PMID: 29618175; PMCID: PMC5903088.
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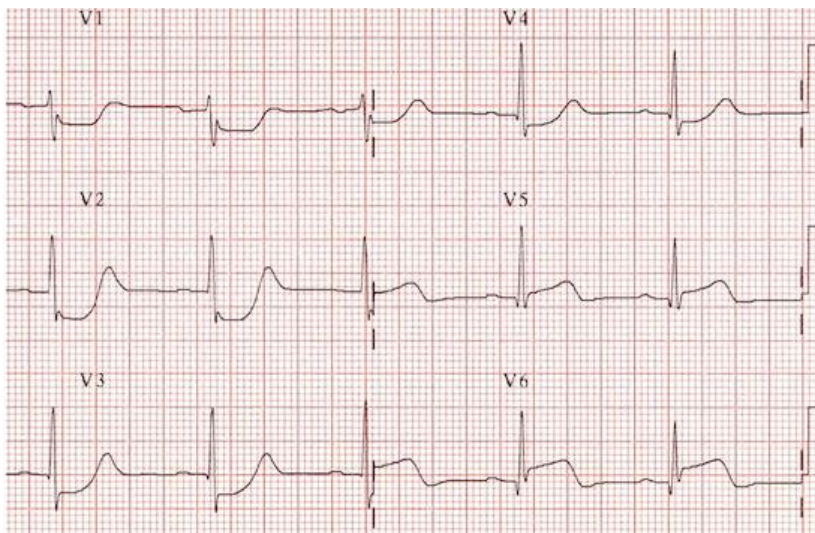
## Where Mistakes Are Made, ST Segment Depression



**Jerry W. Jones, MD FACEP FAAEM**  
Section Editor, ECG Corner

Let's look at just the precordial leads of an ECG for the moment (Figure 1)

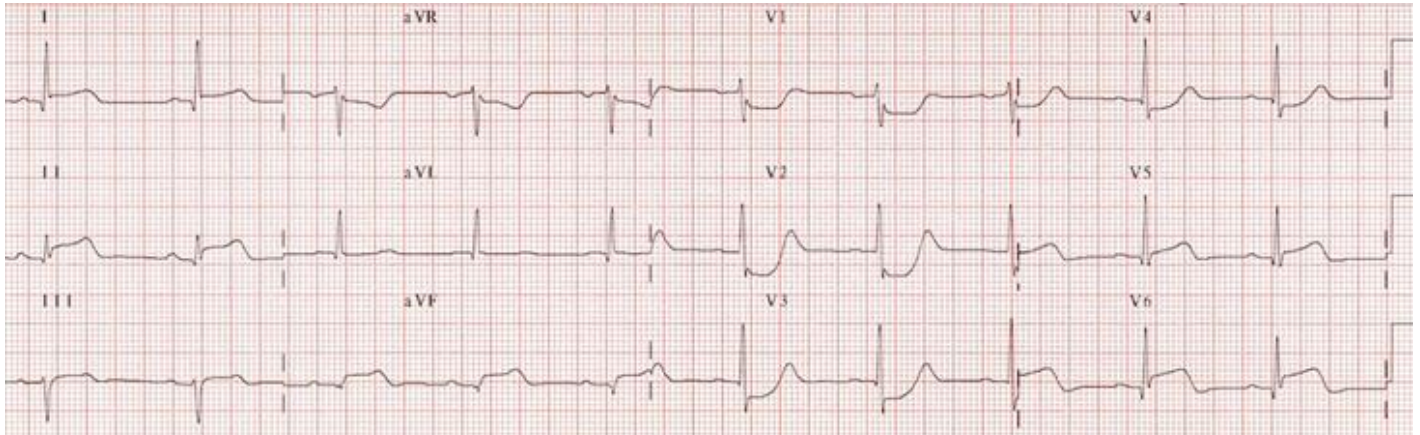
The most notable finding on this portion of the ECG is the obvious ST depression in Leads V1 – V4. What does ST depression mean to you? Most people reply **subendocardial ischemia** – and they would be correct some of the time... but not **all** the time!



**Figure 1**

Assuming that ST depression **always** means subendocardial ischemia is where the mistake begins. In a nutshell – it does not **always** mean subendocardial ischemia! Sometimes it means acute epicardial ischemia. That's right: exactly the same as a STEMI. And right here in Leads V1 – V3 (sometimes even Lead V4, as in this ECG) is where many such mistakes are made. OK, I always say, "Never diagnose anything from a rhythm strip or an incomplete 12-lead ECG," so let's see the whole ECG...

We can see there is a lot more to this ECG than just the changes in the precordial leads, and we didn't even discuss **all** the changes in the precordial leads! There is ST elevation in Leads II, III, and aVF. That



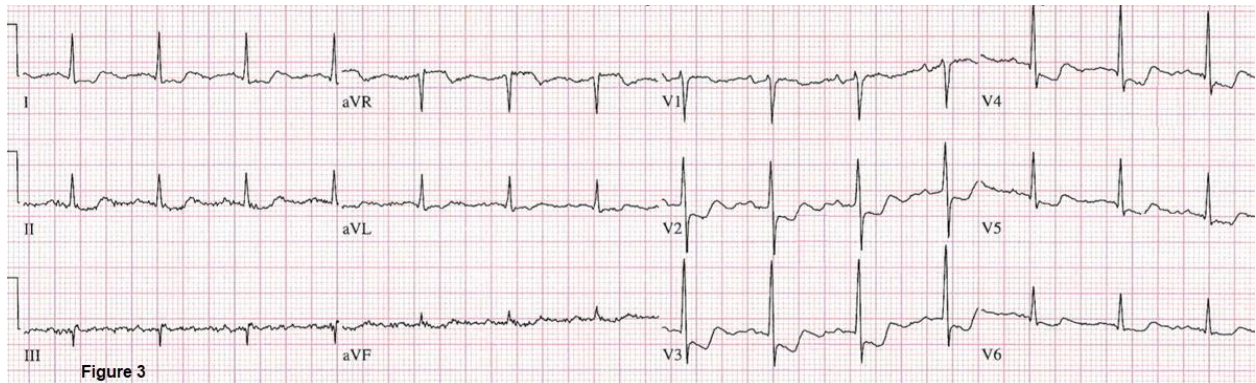
**Figure 2**

strongly suggests an acute inferior wall MI.

But we also see ST elevation in Lead I and Leads V5 and V6. We do not see ST elevation in Lead aVL and the ST elevation in Lead III is very subtle and minimal.

But let's turn our attention back to Leads V1 – V3 specifically. So many people would see that and say, "ST depression in V1 – V3... that's anteroseptal ischemia!" I have seen that exact scenario during my career as a teaching attending physician with some of these patients being sent home because their chest pain resolved spontaneously in the ER!

ST depression in Leads V1 – V3 occurring on the 12-lead ECG of a patient with chest pain should always make you think of an acute posterolateral MI – **not** subendocardial ischemia. Let's look at an ECG with a **true** anteroseptal subendocardial ischemia...



This (Figure 3) is an ECG with a true anteroseptal subendocardial ischemia... and basolateral, lateral, and inferior subendocardial ischemia as well. Notice **two** things...

1. With true anteroseptal subendocardial ischemia, Lead V1 often has no ST depression and, on the contrary, may have a small amount of ST elevation.
2. Subendocardial ischemia does not localize; it's everywhere! When you see ST depression restricted to a particular vascular area on a 12-lead ECG – recorded on a patient with chest pain –

you are much more likely seeing the ST depression of a reciprocal change to an acute STEMI. And to make matters even more confusing – the reciprocal change *can appear first*, and it can be a lot *more impressive* than the primary change of ST elevation! (The ST depression in Leads V1 – V3/V4 is a *reciprocal change* to an acute posterolateral MI.)

Look at Leads V1 – V3 in Figure 3 again – very closely! What else can look exactly the same and accompany an acute inferior MI? A **right ventricular infarction** can look exactly the same! Exactly! So, before you call this an anteroseptal subendocardial ischemia, remember you have only one out of three chances of being correct – and the other two possibilities are acute MIs!

Remember **Jone’s Rule**:

Any ST depression on the 12-lead ECG of a patient with chest pain compatible with an acute coronary syndrome represents a reciprocal change to a STEMI until **proven otherwise**.

Recommended Reading:

1. Goldberg, HL MD, Borer, JS MD, Jacobstein, JG MD, Kluger, J MD, Scheidt, SS MD, Alonso. DR MD. *Anterior S-T Segment Depression in Acute Inferior Myocardial Infarction: Indicator of Posterolateral Infarction*. The American Journal of CARDIOLOGY. Volume 48; December 1981.
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## Valley Fever: Another Indicator of Climate Change?

Tracey Q. Davidoff, MD, FCUCM

Coccidiomycosis, or Valley Fever, is an infection caused by the dimorphic fungi *Coccidioides*. *Coccidioides* grows as a mold a few inches below the soil surface and can remain suspended in air for prolonged periods. When inhaled, it can penetrate human airways and lung tissue causing infection.

Traditionally, this disease is called Valley fever because most cases are identified in the San Joaquin Valley, also called the Central Valley, in California. Cases have also been reported in south-central Arizona and other areas of California, southern Nevada, southwestern Utah, southern New Mexico and the Rio Grande Valley in Texas. Approximately 150,000 infections are documented yearly (Galgiani et. al., 2016), although since many infections are asymptomatic, this number is likely higher.

Recently there has been a substantial increase in the incidence of this disease within California and Arizona. In 1990, in Arizona, the incidence was 5.2 cases per 100,000, and in 2020, the incidence increased to 160.6 cases per 100,000. Similarly, in California the incidence in 1990 was 4.3 cases per 100,000, increasing to 18.1 cases per 100,000 in 2020. It is speculated that several causes may be responsible for this drastic increase. First, serologic testing has become more sensitive and more available. Second, older, presumably previously unaffected, non-immune and therefore susceptible persons have moved to the

endemic area. Lastly, recent prolonged drought has made the soil more hospitable to this organism, allowing more growth and subsequent distribution into the environment. (CDC, 2013, Hector, et. al. 2011)

Risk of infection is seasonal; infection occurs during the dry season following a rainy season. In Arizona this is typically May to July and October to early December, whereas in California, infections typically occur in late spring to late fall. Patients most at risk for infection are those with impaired cellular immunity, such as those on immunosuppressive regimens, those with HIV with CD4 cell counts < 250 cells/microL, chemotherapy patients and those with some immunodeficiency syndromes. These patients are also at risk for reactivation of a previously acquired, clinically inapparent *Coccidioides* infection, which may be outside of the seasonal variation, or even outside of the endemic area, if the patient has moved.

Clinical manifestations of primary pulmonary *Coccidioides* infection generally follows one of three patterns:

- Asymptomatic or minimally symptomatic disease
- Focal pneumonia
- Diffuse reticulonodular pneumonia

Approximately 60% of cases are thought to be asymptomatic or minimally symptomatic and may not seek medical attention. (Smith, et. al. 1946) The most common manifestation in those who do seek care is focal pneumonia occurring 7-12 days after exposure. Patients generally have chest pain, cough and fever. Diffuse reticulonodular pneumonia is a less common presentation and is due to homogeneous seeding of the lungs. Some patients may be clinically stable despite the burden of disease whereas others may have severe dyspnea, respiratory failure and fungemia. Mortality is higher for this form of the disease.

Most patients will also develop a wide array of systemic symptoms which may include night sweats, headache, rash, weight loss, and fatigue. The cutaneous manifestations may include erythema nodosum, erythema multiforme or toxic erythema. Rheumatologic manifestations, which are less common, may include symmetric arthralgias of the ankles, knees and/or wrists, usually without redness or effusion.

Routine laboratory studies such as CBC, CMP, and procalcitonin are usually unremarkable. There may be a mild increase in eosinophils and ESR. Specific serologic testing for IgM and IgG is likely to be negative early in disease. CXR may show either type of pneumonia; focal pneumonia tends to be in the upper lobes and may be associated with ipsilateral hilar adenopathy and parapneumonic effusion. Nodules and thin-walled cavities may be seen in some cases. Bronchoalveolar lavage with cytologic exam may be required in severe cases.

Infection should be suspected in patients living in or traveling from an endemic area who present with the following:

- Respiratory illness lasting  $\geq 1$  week with a pulmonary infiltrate on CXR, especially in the upper lobe with mediastinal lymphadenopathy.
- Presumed CAP without improvement with appropriate empiric antibiotic therapy
- Pneumonia patient with a rash resembling erythema nodosum or erythema multiforme, or diffuse arthralgias
- Patient with respiratory illness who has other findings of coccidiomycosis such as night sweats, marked fatigue, weight loss or unexplained eosinophilia

Treatment is based on disease severity. Again, the majority of patients will have mild disease and improve spontaneously without evaluation and treatment. Patients with moderate disease should be treated with

an anti-fungal such as fluconazole or itraconazole. Moderate disease is defined as involvement of more than one-half of a lung, persistent symptoms for more than three weeks, or loss of more than 10% of body weight. Patients at high risk or who have severe or complicated disease may require treatment with amphotericin B. These patients are generally immune suppressed either due to AIDS, transplantation, hematologic malignancy, or chemotherapy. Patients at increased risk for complications also include second or third trimester pregnancy, those who are postpartum, diabetics, the frail elderly, those of African or Filipino descent, and those being treated with anti-cytokine therapy for rheumatologic, gastrointestinal or dermatologic disease.

Although most patients will have resolution of all symptoms in one year, some patients may develop syndromes of prolonged fatigue, and pulmonary complications including nodules, cavities, and diffuse reticulonodular pneumonia.

So how does climate change affect this disease? Remember the life cycle of *Coccidioides* requires dry, arid soil, and the spread of disease is related to the spores carried on the wind and dust. Climate change has been increasing times of drought, aridity, dust storms, and wildfires in the areas where *Coccidioides* is most prevalent. (OEHHA, 2022) This directly and indirectly affects fungal proliferation, as well as the dissemination of the spores, resulting in an increase in human infection. Keep in mind also that other areas outside of the Central Valley area of California are also subject to this same climate change. Contiguous areas such as parts of San Bernadino, Los Angeles and others are also seeing increased coccidiomycosis cases, as well as the soil testing positive for the spores.

Researchers predict that climate changes causing increasing prolonged dryness and drought in the American Southwest will cause most of the area west of the Rocky Mountains to be coccidiomycosis endemic. (Gorris, et. al. 2019) Arizona has already seen this effect and cases there now outnumber those in California. (OEHHA, 2022) Other factors include dust storms related to the Santa Ana winds, earthquakes, and wildfires. The fires change the soil composition and ground cover making it more hospitable to *Coccidioides*. Creating fire lines by digging also disrupts soil and potentially spreads the spores. An uptick in disease prevalence has been seen in those firefighters. The Santa Ana winds coincide with the highest fire danger, which also coincides with the seasonality of Valley fever, making a “perfect storm” for increasing the incidence of this disease in humans in the Southwest, and beyond. With increasing incidence, the Urgent Care provider needs to be aware of this disease, especially in those patients presenting from affected areas and those near affected areas, as Valley fever is no longer confined to the Central Valley of California anymore.

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3. Hector RF, Rutherford GW, et. Al. The public health impact of coccidiomycosis in Arizona and California, *Int J Environ Res Public Health*. 2011 Apr;8(4):1150-73. Epub 2011 Apr 15.
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5. Office of Environmental Health Hazard Assessment (OEHHA, 2022). Indicators of Climate Change in California, Fourth Edition, California Environmental Protection Agency, OEHHA. Valley Fever, VI-19-VI-29.
6. Gorris ME, Treseder KK, Zender CS and Randerson JT (2019). Expansion of coccidioidomycosis endemic regions in the United States in response to climate change. *Geohealth* 3(10)

## Coding Corner: Addressing Common Coding Pitfalls

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Section Editor, Coding Corner



In this coding education section, we will address nine areas of common coding pitfalls for clinicians:

- 1) Abnormal vital signs- Generally, abnormal vital signs should be added as a diagnosis if not part of a primary diagnosis. For example, unexplained tachycardia should be added as a diagnosis. Tachycardia in the setting of Influenza is not necessary. Any patient whose BP is elevated in the center should have it added as a diagnosis. If they have a history of HTN, then you have met the criteria for a chronic illness with exacerbation. If they do not have a history of HTN, elevated BP could be added as a diagnosis with a plan for dealing with the elevated BP.
- 2) Independent historian- An independent historian can be a parent, guardian, surrogate, spouse, witness (to name a few) who provides all or part of the history because the patient is unable to provide a complete or reliable history due to the patient's age, dementia, psychosis, etc. or because a confirmatory history is judged to be necessary. The independent historian does not need to be obtained in person. Translator services do not count and most importantly, the independent historian needs to be documented.
- 3) Prescription drug management- Prescription drug management is met when the provider discusses, starts, continues, discontinues, or adjusts a prescription medication. Documentation of the drug, strength, and dosage should be included in the note. There must be documentation of one of the following:
  - A. a prescription drug that the provider is evaluating the appropriateness for the patient and/or continuing to prescribe for the patient
  - B. documentation on the prescription drug(s) that are being considered and the reason why they are being considered
  - C. documentation of a decision to initiate a new prescription drug
  - D. documentation of a provider's decision to discontinue a prescription drug or to adjust the current dosage relative to changes in a patient's condition
  - E. the patient's condition, possible adverse effects, potential benefits, etc. of the patient using this prescription drug
- 4) Tests considered but not ordered- If you recommend POC tests or other labs but the patient refuses, if you document this conversation, it will count towards the complexity of data. Consider this; you see a 66-year-old male patient with a complaint of fever up to 102.4, body aches, cough, loss of appetite, nausea, and fatigue. You recommend POC tests for influenza and COVID but the patient refuses. Documentation of this would count as if you had performed these tests. Frequently, with appropriate documentation, this could elevate a level 3 complexity of data to an appropriate code of level 4 complexity of data.


- 5) Comorbid conditions- If the patient has a comorbid condition which could increase the risk of complications and/or management of the patient, these conditions should be added as a diagnosis and a brief treatment plan be included in the MDM. For example, a diabetic patient with a foot wound can increase the risk of patient management. Adding diabetes as a secondary diagnosis and a brief treatment plan, "patient will continue metformin 500 mg BID, check blood glucose level daily, maintain a strict diabetic diet, and follow up with PCP," is sufficient.
- 6) Systemic symptoms- Systemic symptoms would include SIRS criteria, nausea and vomiting not in the setting of GE, moderate-severe fatigue, confusion, dizziness, rash which is not dermatologic in nature, body aches, loss of appetite, to name a few. To meet the criteria for "acute illness with systemic symptoms", the guidelines state, "systemic symptoms may not be general but may be single system". Most influenza, pneumonia, pyelonephritis, and COVID patients would meet this criterion.
- 7) Tobacco counseling- Tobacco counseling is often overlooked. If you have a conversation with the patient regarding smoking cessation, we can add a CPT code for this counseling. The counseling must be at least three minutes long to meet the criteria. The CPT code for 3-10 minutes is 99406 and for >10 minutes, the code is 99407.
- 8) ED transfers- Most patients who need ED transfer via EMS will be level 5 patients. Documentation of the patient's condition and any abnormal vital signs or an acutely ill patient will warrant a level 5 code. For the patient who is stable with normal vital signs, documentation of a differential diagnosis would be helpful when choosing the correct level of service. For example, the chest pain patient with a normal EKG and normal vital signs who is not acutely ill, documenting a differential diagnosis to include possible cardiac event or PE, will usually be a level 5 visit.
- 9) Undiagnosed new problem with uncertain prognosis- a patient presenting with symptoms such as persistent fatigue, unexplained weight loss, and enlarged lymph nodes would fit into this category. Despite various tests and investigations, the exact cause of these symptoms remains unknown. The uncertainty surrounding the diagnosis and prognosis can pose a challenge in providing the patient with a clear treatment plan and long-term outlook. Patients with chest pain, abdominal pain, or headache will fit nicely in this category IF they are not acutely ill and require ED evaluation.

Reference:

<https://www.ama-assn.org/system/files/2019-06/cpt-office-prolonged-svs-code-changes.pdf>

## A Best Practice from the College of Urgent Care Medicine

### Diagnosis and Treatment of Group-A Streptococcal Pharyngitis in Adults and Children

Date Reviewed	November 13, 2023
<p>Evidence-based guidelines</p> 	<p>Shulman ST, Bisno AL, et. al. Clinical Practice Guideline for the Diagnosis and Management of Group A Streptococcal Pharyngitis: 2012 Update by the Infectious Disease Society of America. <i>Clinical Infectious Diseases</i>, Vol. 55, Issue 10, 15 November 2012, e86-e102. <a href="https://doi.org/10.1093/cid/cis629">https://doi.org/10.1093/cid/cis629</a></p> <p>ESCMID Sore Throat Guideline Group; Pelucchi C, Grigoryan L, Galeone C, Esposito S, Huovinen P, Little P, Verheij T. Guideline for the management of acute sore throat. <i>Clin Microbiol Infect</i>. 2012 Apr;18 Suppl 1:1-28. doi: 10.1111/j.1469-0691.2012.03766.x. PMID: 22432746. <a href="https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1469-0691.2012.03766">https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1469-0691.2012.03766</a></p> <p>Gerber MA, Baltimore RS, et. al. Prevention of Rheumatic Fever and Diagnosis and Treatment of Acute Streptococcal Pharyngitis. A Scientific Statement From the American Heart Association Rheumatic Fever, Endocarditis, and Kawasaki Disease Committee of the Council on Cardiovascular Disease in the Young, the Interdisciplinary Council on Functional Genomics and Translational Biology, and the Interdisciplinary Council on Quality of Care and Outcomes Research: <i>Endorsed by the American Academy of Pediatrics</i>. <i>Circulation</i>. 2009;119:1541–1551. <a href="https://doi.org/10.1161/CIRCULATIONAHA.109.191959">https://doi.org/10.1161/CIRCULATIONAHA.109.191959</a></p>
Patient Population	Adults and children presenting with sore throat
Rationale	Sore throat is a common presenting complaint in Urgent Care. The overwhelming majority of these patients have viral pharyngitis or non-infectious cause of sore throat with a very low pretest probability for streptococcal disease. For this reason, not all patients need rapid streptococcal antigen testing. Similarly, most patients do not require antibiotic treatment unless there is a high likelihood they have streptococcal pharyngitis. With greater emphasis being placed on Antibiotic Stewardship and curtailing the prescribing of unnecessary antibiotics for viral disease, this guideline makes recommendations for appropriate testing and treatment of patients with sore throat in the Urgent Care setting.
Introduction	Sore throat is one of the most common complaints seen in emergency medicine and Urgent Care. Although many patients

	<p>receive antibiotics for this complaint, only 5-15% of adults, and only 15-35% of children in the US will have a Group A streptococcal (GAS) infection (Mustafa). Unnecessary antibiotic prescribing for sore throats has been documented in the US in more than 50% of advanced practice nurses and more than 65% of physicians (Ellis).</p> <p>The treatment of GAS should be aimed at providing symptom relief, shortening the duration of illness, preventing complications such as abscess or rheumatic fever, and reducing the risk of contagion. At the same time, it should also minimize the use of antibiotics when not clinically indicated (Mustafa).</p>
<p>Key Points for Urgent Care (Strength of recommendation, quality of evidence), based on GRADE (Grading of Recommendations Assessment, Development, and Evaluation) criteria (Guyatt).</p>	<ul style="list-style-type: none"> <li>• Rapid antigen detection testing (RADT) should be performed on patients suspected of having GAS as clinical features alone do not reliably discriminate GAS from viral pharyngitis. (strong, high)</li> <li>• When overt viral features of cough, rhinorrhea, oral ulcerations, or hoarseness are present, no testing should be performed. (strong, high)</li> <li>• Positive RADTs are highly specific and do not need to be confirmed with a traditional culture. (strong, high)</li> <li>• Back up throat cultures for negative RADT should not routinely be sent on ADULTS because of the low incidence of rheumatic fever and suppurative complications in these patients. (strong, moderate) For children, see below.</li> <li>• Anti-streptococcal antibody titers should not be used. (strong, high)</li> <li>• Diagnostic testing should not be done on children &lt; 3 years as rheumatic fever is rare in these groups. (strong, moderate) Testing may be considered for children &lt; 3 years when a known exposure such as a sibling has occurred. (strong, moderate)</li> <li>• Follow up post treatment testing should not be performed. (strong, high)</li> <li>• Diagnostic testing or empiric treatment of asymptomatic household contacts is not recommended. (strong, moderate)</li> <li>• Patients with test positive GAS pharyngitis should be treated with the appropriate antibiotic, dose and duration. Penicillin or amoxicillin is the first line (see Table 1). (strong, high)</li> <li>• Patients with a history of allergy to penicillin can be treated with a first-generation cephalosporin unless they have a history of anaphylaxis. Clindamycin or a macrolide may be used in patients with a history of anaphylaxis to penicillin. (strong, moderate)</li> <li>• Analgesics and antipyretics should be considered for symptom control. (strong, high)</li> <li>• Aspirin should be avoided in children. (strong, high)</li> <li>• Corticosteroids are not routinely recommended. (weak, moderate) See below.</li> <li>• Patients with recurrent pharyngitis may be either having recurrent episodes or may be carriers with repeated viral infections. (strong, moderate)</li> </ul>

	<ul style="list-style-type: none"> <li>• Patients who are carriers should not be identified or treated because they do not develop complications or spread disease. (strong, moderate)</li> </ul>
<p>Discussion</p>	<p>One of the most important points when considering treatment for an exudative pharyngitis is not treatment to cure the disease of streptococcal pharyngitis but to provide symptom relief, prevent transmission to others, and prevent complications, the most serious of which are peritonsillar or retropharyngeal abscess and rheumatic fever, especially in the pediatric population. These complications only occur in the US in a small number of patients. Treatment of uncomplicated streptococcal pharyngitis with antibiotics only shortens the course of illness by hours to 2 days, and many cases go undetected and improve spontaneously. Most patients will improve in 3-5 days without treatment (Brink). The use of antibiotics for all sore throats without testing or with negative testing is inappropriate, potentially dangerous, and contributes to the worldwide problem of antibiotic resistance. Clinicians should prescribe antibiotics to only those patients with a high likelihood of GAS who test positive for the infection. Treating a patient for GAS without a conclusively positive test may lead to over 40% of adult patients being prescribed antibiotics unnecessarily (Mustafa).</p> <p>Diagnosis of GAS by using the criteria of pharyngeal exudate and enlarged, tender cervical lymphadenopathy has a specificity of &gt;90%, but a sensitivity of &lt;15% (Ebell). Clinical scoring systems, such as Centor and McIsaac improve the ability to detect GAS infection, but also have been shown to have low sensitivity (50%) but high specificity (82-98%). It is recommended to use these criteria to determine who to test, NOT who to treat.</p> <p>Rapid antigen detection testing (RADT) is available in most Urgent Care centers, with specificity approaching 99%, and sensitivity between 77-92%. Because of the lower sensitivity and higher risk of complications in children, negative RADT's should be confirmed with a PCR test or culture. Since adults are far less likely to develop complications, a confirmatory test is not required in these patients.</p> <p>If a rapid test is negative, and a culture or PCR is sent to the lab, the likelihood of developing complications in 1-2 while waiting for results is very small. The clinician need not start the patient on antibiotics while waiting for results. If, however, one chooses to do this, the antibiotic should be discontinued if the culture returns negative.</p> <p>Cultures that return positive for other bacteria, such as Group C and G streptococcus need not be treated; these bacteria do not result in the complications associated with GAS. Ordering a culture only for GAS will prevent the return of these results.</p>

	<p>Patients should be treated based on the appropriate symptoms, (&gt;2-3 Centor Criteria or similar) and a positive test. Patients who are minimally or not symptomatic may have viral disease in the setting of a carrier state. Patients who are carriers should not be treated.</p> <p>First-line treatment for GAS pharyngitis is penicillin or amoxicillin. For children the liquid preparation is not particularly palatable, however amoxicillin in liquid form generally is quite palatable. Conversely, penicillin V tablets are quite small and easier to swallow than the larger amoxicillin tablets. The clinician should take this into account when prescribing to ensure compliance with treatment. Chewable preparations may also be available. Benzathine Penicillin G given in a single dose IM may be appropriate in some cases to improve compliance. It is, however, quite painful.</p> <p>Patients who have mild, non-anaphylactoid allergies to penicillin can be treated with a first-generation cephalosporin with little to no loss in efficacy. Those with a true anaphylaxis type reaction to penicillin or amoxicillin should be treated with clindamycin or a macrolide, keeping in mind that resistance to macrolide antibiotics is increasing in the US (Green).</p> <p>See Table 4 for recommendations and dosages.</p> <p>Symptomatic treatment should also be recommended and include acetaminophen and NSAID's for fever and pain. Aspirin should never be given to children. Over the counter sore throat drops or sprays containing benzocaine (NOT cough drops) may provide temporary relief. Dietary recommendations such as soft foods may also be of value. When initial guidelines were written, there was not enough clinical evidence to recommend corticosteroids for the treatment of sore throat (Principi); however, a more recent meta-analysis showed the benefit of a single dose of corticosteroids for relief of pain with minimal side effects (Sadeghirad).</p> <p>Patients may return to work or school 24 hours after the first dose of antibiotics as long as fever has resolved, and they feel well enough to return.</p> <p>Patients with suspected abscess, severe swelling, inability to swallow (drooling), or dehydration should be referred for emergency evaluation forthwith. Patients with significant recurrent infections, multiple antibiotic allergies, or history of abscess should be referred to ENT for further evaluation.</p>
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Reviewers	Tracey Q. Davidoff, MD, FCUCM and Cesar Mora Jaramillo, MD FAAFP FCUCM
Attachments (flow charts, graphics, tables, etc.)	See below

**Figure 1. Centor Criteria for sore throat (1981)**

Centor Symptom	Point
Tonsillar exudates	1
Swollen, tender, anterior cervical lymph nodes	1
Lack of cough	1
Fever or history of fever	1

Higher scores translate to a higher likelihood of streptococcal pharyngitis. Score of 1 with a 2.5% probability, and score of 4 with 56% probability.

**Figure 2. Mclsaac or Modified Centor Score (1998)**

Mclsaac Symptom	Point
Tonsillar swelling or exudate	1
Tender anterior cervical adenopathy	1
No cough	1
Temperature >38°C	1
Age 3-14	1
Age 15-44	0
Age ≥ 45	-1

Highest score 4 associated with an 83.1% risk of streptococcal pharyngitis

**Figure 3. FeverPAIN Score (2013)**

Symptom	Point
Fever in last 24 hours	1
Absence of cough or coryza	1
Symptoms for ≤ 3 days	1
Purulent tonsils	1
Severe tonsil inflammation	1

Interpretation:

- 0-1 points 13-18% risk for streptococcal pharyngitis, no antibiotics recommended
- 2-3 points 34-40% risk for streptococcal pharyngitis, 3-day back up prescription for antibiotics recommended
- > 4 points 62-65% risk for streptococcal pharyngitis, antibiotics if severe, or 2-day back up prescription for antibiotics if symptoms mild

**Table 4. Antibiotic Treatment Choices for Confirmed Group A Streptococcal Pharyngitis**

Drug, Route	Children's Dosage	Adult Dosage	Duration	Recommendation Strength, Quality of Evidence
No Penicillin Allergy:				
Penicillin V, oral	250 mg BID-TID	250 mg QID or 500 mg BID	10 days	Strong, high
Amoxicillin, oral	50 mg/kg once daily, max. 1000 mg	500 mg BID	10 days	Strong, high

	25 mg/kg twice daily, max. 1000 mg			
Benzathine penicillin G, IM	< 27 kg, 600,000 Units; > 27 kg, 1.2 mUnits	1.2 mUnits	Once	Strong, high
Penicillin Allergy				
Cephalexin, oral	20 mg/kg/dose BID, max 1000 mg per day	500 mg BID	10 days	Strong, high
Cefadroxil, oral	30 mg/kg/dose BID, max 1000 mg per day	500 mg BID	10 days	Strong, high
Clindamycin, oral	7 mg/kg/dose TID, max 900 mg/day	300 mg BID	10 days	Strong, moderate
Azithromycin*, oral	12 mg/kg once daily, max 500 mg Or 12 mg/kg once, followed by 6 mg/kg day 2-5, max 500 mg/dose	500 mg daily Or 500 mg day 1, then 250 mg day 2-5	5 days	Strong, moderate
Clarithromycin*, oral	7.5 mg/kg/dose BID, max 250 mg/dose	250 mg BID	10 days	Strong, moderate

\*Note increasing resistance to macrolides in some areas may not be as effective. Check antibiograms in your area.

**Insights - Organizations Driving Innovation in Urgent Care Education**

**Navigating Whole Person Care for the Underserved in Urgent Care**

**Vicky Pittman, PA-C. Hippo Education**

Tens of millions of people in the United States have trouble accessing the healthcare they need. Whether for lack of housing, insurance, or transportation or because of language and literacy barriers, there are so many reasons why people who need medical care may not be able to reach us. Or when they do, we may not always know how to help. As front-line clinicians, we can play a role in helping our vulnerable community members. This is especially true for those of us working in Urgent Care.

Urgent Care is the safety net for patients in our communities. As an industry, we are poised to help creatively and compassionately provide access to care for all patients, including the most vulnerable. Here’s what we can do on our next shift to provide care to all patients, especially the underserved.

**Maintain a trauma-informed approach to care.**

Trauma is universal and happens on individual and collective levels. Some trauma may be obvious (like the physical injury of an assault), and others less so, but just as impactful. For example, take Adverse Childhood Events (ACEs). Over 60% of adults in the US report at least one ACE, which has been shown to impact long-term health (e.g., increased rates of heart disease, cancer, substance use disorder, and psychiatric illness). Approaching encounters with this in mind is essential to delivering effective care.

**Be willing to ask questions and improvise.**

Urgent Care clinicians are masters at learning to work with limited resources. For the underserved patients, it's even more important to be adaptable. Ask questions and involve the patient in the treatment plan process. For example, this may look like administering intramuscular corticosteroids instead of prescribing steroids if there is concern about the ability to afford medications. Or for those with food insecurity, do you need to adjust your dosing regimen for a medication that is to be taken with food based on when the patient will be able to eat? Creativity and adaptability in your care translates to better patient experiences and outcomes.

**Remember that treatment isn't always a prescription.**

For underserved patients, key aspects of a treatment plan may include helping to meet their basic needs. This may look like keeping a stock of basic necessities like socks, wound care kits, or hygiene kits. Clinics can create and distribute a community resource list with information on food, housing, and financial assistance. At the heart of medicine is a love for humanity, so let's expand our thinking on how we can put that into practice.

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## **Pediatric Orthopedic Injuries: Evidence-Based Management in the Urgent Care**

### **EB Medicine**

#### **Treatment**

##### **Splints and Casts**

Most stable fractures can be splinted, with urgent (within 1 week) pediatric orthopedic follow-up for eventual reduction (if needed) and cast placement. Splinting and casting preserve proper bone alignment and alleviate discomfort while preventing further injury and promoting healing; splinting may be preferable in the first few days after injury, as progressive soft tissue swelling can lead to neurovascular compromise within a circumferential cast.<sup>117</sup> **Table 5** details the appropriate type of splint for specific injuries. Commercial preformed splints provide convenience of application and are appropriate for sprains and low-risk fractures. Custom-molded splints provide a higher degree of immobilization and may be associated with higher patient compliance, as they are more difficult to remove. Walking boots, which allow for periodic removal for skin visualization, may be considered in place of a lower extremity splint, which have been associated with skin breakdown. Neurovascular status should be checked again after splinting or cast immobilization is achieved.

Splinting should be performed for injuries with focal tenderness and decreased range of motion even in the absence of definitive radiographic evidence of fracture in the initial period after injury. Salter-Harris I fractures, Type I supracondylar humerus fractures, toddler fractures, and scaphoid fractures, among others, may become radiographically distinguishable only after callus formation. The presence of a radiolucent fat pad posterior to the distal humerus on lateral elbow radiographs is an indication for splinting and referral for orthopedic follow-up. In a review of 59 patients diagnosed with toddler fracture in an ED setting, 41% of children with initial normal radiographs demonstrated radiographic evidence of new bone growth at follow-up, supporting the diagnosis of fracture.<sup>118</sup> In the case of toddler's fractures, a child may self-limit their weight bearing. Risks associated with splinting, including skin breakdown and pressure sores, may outweigh the benefit of immobilization as outcomes are unchanged when these

fractures are treated conservatively without immobilization; consultation with a specialist may be indicated to determine the appropriate course of action on case-by-case basis.

Scaphoid fractures carry a high risk of nonunion because the proximal portion of the scaphoid receives its blood supply only via retrograde flow through the distal portion. In patients with scaphoid tenderness, the wrist should be immobilized in a thumb spica splint even if no fracture is visualized initially, and confirmatory radiographs should be obtained in 2 weeks to exclude occult fracture before discontinuing immobilization.<sup>119</sup> A systematic review of 75 studies pertaining to the diagnosis of scaphoid fracture found that 25% of patients with occult fracture had negative plain radiographs.<sup>120</sup> In a review of 351 scaphoid fractures, 90% healed with nonoperative treatment, with some requiring prolonged cast immobilization.<sup>121</sup>

### Reduction

The need for reduction depends on the age of the patient and the involved area of bone, as well as the degree of angulation, displacement, and malrotation. Fractures with significant angulation ( $>20^\circ$ ), displacement, or neurovascular compromise require immediate orthopedic consultation for emergent reduction. Skeletal immaturity conveys higher potential for bone remodeling; in general, greater degrees of displacement and angulation can be tolerated in younger children. For example, in children aged  $<5$  years, proximal humerus fractures with up to  $70^\circ$  of angulation and 100% displacement may be managed conservatively with sling immobilization, whereas in children aged  $>12$  years, up to  $40^\circ$  of angulation and 50% displacement are acceptable.<sup>122</sup> In children with distal forearm fractures with  $<15^\circ$  of angulation, immobilization without reduction leads to complete remodeling and no clinical or functional sequelae.<sup>123,124</sup> Patients with fractures that require reduction should be provided analgesia, placed in a fasting state (NPO) in anticipation of procedural sedation, and have the extremity placed in an appropriate splint.

For radial head subluxation, manual reduction can be achieved by various maneuvers. Five small prospective, randomized studies generally support the hyper-pronation technique compared with supination-flexion, citing more effectiveness and no measurable difference in pain.<sup>19,36,125-127</sup> Parents should be educated in avoiding a pulling mechanism on the arm to decrease risk of recurrence.

### Pain Control

Pain is typically most severe in the first 72 hours after injury. A 2014 survey of 683 North American pediatric emergency physicians and orthopedic surgeons regarding pain management in children with musculoskeletal injury indicated overall poor management of pain, particularly in younger children, and at home after discharge.<sup>128</sup>

Adequate analgesia should be maintained with ibuprofen and acetaminophen as first-line medications, with opioids (oral, intranasal, or parenteral) if further pain control is required; opioids should be reserved for moderate or severe pain. Clinicians should avoid the use of codeine-containing products, per the recommendations of the US Food and Drug Administration and the AAP,<sup>130,131</sup> due to the risk of overdose or under analgesia associated with CYP2D6 polymorphism causing variable rates of metabolism to the active metabolite (morphine). Children receiving codeine may experience either inadequate analgesia or opioid overdose effects, including respiratory depression.<sup>132</sup>

### Other Treatments/Techniques

Nondisplaced and minimally displaced fractures of the middle third of the clavicle may be immobilized using either a sling or figure-of-eight bandage, with similar outcomes.<sup>133,134</sup> Emergent orthopedic referral

is indicated for open fracture, neurovascular compromise, and tenting of the skin. Complete fracture displacement, comminution, shortening, distal third fractures involving the acromioclavicular joint, and proximal third fractures with posterior displacement should also prompt referral.

Supracondylar humerus fractures are managed according to their Gartland classification and the American Academy of Orthopedic Surgeons' 2014 *Appropriate Use Criteria for the Management of Pediatric Supracondylar Humerus Fractures*,<sup>135</sup> which is available at <http://doi.org/10.5435/JAAOS-D-15-00406> Type I fractures are managed with immobilization with a cast or posterior long-arm splint without reduction, whereas Type II and III fractures are typically managed operatively, with emergent orthopedic consultation, given the increased risk of compartment syndrome. The affected elbow should be maintained at 90° of flexion, as flexion beyond 90° can produce elevation of compartment pressures.<sup>136</sup>

A child with suspected SCFE should be made non–weight bearing immediately to prevent further slippage of the femoral head and should be evaluated by a pediatric orthopedist for operative reduction and internal fixation as soon as possible to decrease the risk of avascular necrosis.<sup>137</sup>

Knee immobilization is appropriate for children with knee fractures. Most other knee injuries require only conservative management, including adequate analgesia and weight-bearing as tolerated. Range-of-motion exercises are critical to preventing loss of mobility and contracture.<sup>138</sup> Patients with tibial spine fractures and patellar sleeve fractures should have urgent orthopedic consultation, with possible operative repair.<sup>58,61</sup>

Toddler fractures have been noted to heal reliably within four weeks, despite immobilization type and duration, and may not ultimately need any immobilization.<sup>139,140</sup> A walking boot may be utilized provide comfort for during ambulation and may be worn as tolerated by the child.

Calcaneal fractures, severe foot injuries and confirmed or suspected Lisfranc injuries may be immobilized in a bulky dressing and warrant same day referral to orthopedics. Patients should be non–weight-bearing on these injuries.

#### Management of Nonaccidental Injury

Once medically stabilized, a child with concern for nonaccidental injury should be evaluated by a child protection specialist. Mandatory reporting laws require that concerns for abuse be reported to Child Protective Services. Transfer to the ED with possible subsequent hospital admission may be warranted to facilitate further evaluation and/or protection from the home environment.<sup>86</sup>

**Table 5. Splints Used for Orthopedic Injuries<sup>129</sup>**

Region	Type of Splint	Indications
<b>Upper Extremity Injuries</b>		
Ulnar side of hand	Ulnar gutter splint	• Fracture of fourth and fifth metacarpals and proximal/middle phalanges
Radial side of hand	Radial gutter splint	• Fracture of second and third metacarpals and proximal/middle phalanges

Thumb, first metacarpal, and carpal bones	Thumb spica splint	<ul style="list-style-type: none"> <li>• Fracture of scaphoid/trapezium</li> <li>• First metacarpal fracture</li> <li>• Thumb fracture</li> </ul>
Finger injuries	Buddy taping	<ul style="list-style-type: none"> <li>• Proximal/middle phalangeal shaft fracture</li> <li>• Finger sprain</li> </ul>
	Aluminum U-shaped splint	<ul style="list-style-type: none"> <li>• Distal phalangeal fracture</li> </ul>
	Dorsal extension-block splint	<ul style="list-style-type: none"> <li>• Middle phalangeal volar plate avulsion</li> <li>• Reduced proximal interphalangeal joint dislocation</li> </ul>
	Mallet finger splint	<ul style="list-style-type: none"> <li>• Extensor tendon avulsion from base of distal phalanx</li> </ul>
Wrist/hand	Volar/dorsal forearm splint (may use a prefabricated cock-up wrist splint)	<ul style="list-style-type: none"> <li>• Soft-tissue injury to hand/wrist</li> <li>• Acute carpal bone fracture (excluding scaphoid/trapezium)</li> <li>• Nondisplaced, minimally displaced, or torus fracture of distal radius</li> </ul>
	Bulky hand compression dressing	<ul style="list-style-type: none"> <li>• Severe hand fracture</li> </ul>
Forearm	Simple sugar-tong splint	<ul style="list-style-type: none"> <li>• Fracture of distal radius and ulna</li> </ul>
Elbow, proximal forearm, and skeletally immature wrist injuries	Long-arm posterior splint	<ul style="list-style-type: none"> <li>• Fracture of distal humeral and proximal/midshaft forearm fracture</li> <li>• Non-torus wrist fracture</li> </ul>
	Double sugar-tong splint	<ul style="list-style-type: none"> <li>• Elbow fracture</li> <li>• Forearm fracture</li> <li>• Nondisplaced, extra-articular Colles fracture</li> </ul>
Shoulder and proximal/midshaft humerus	Sling and swathe splint or Velveau bandage or prefabricated shoulder immobilizer	<ul style="list-style-type: none"> <li>• Clavicle fracture</li> <li>• Proximal/midshaft humerus fracture</li> <li>• Reduced shoulder dislocation</li> <li>• Acromioclavicular joint separation</li> </ul>
	Sling, shoulder immobilizer or figure-of-eight bandage	<ul style="list-style-type: none"> <li>• Clavicle fracture (middle third)</li> </ul>
<b>Lower Extremity Injuries</b>		
Toes	Buddy taping	<ul style="list-style-type: none"> <li>• Phalangeal fracture</li> </ul>
Foot	Walking boot or hard-soled shoe	<ul style="list-style-type: none"> <li>• Distal metatarsal and phalangeal fracture</li> </ul>
	Bulky foot compression dressing	<ul style="list-style-type: none"> <li>• Calcaneal fracture</li> <li>• Severe foot injury</li> <li>• Lisfranc</li> </ul>

Lower leg, ankle, and foot	Walking boot	<ul style="list-style-type: none"> <li>• Severe ankle sprain</li> <li>• Fracture of distal leg, ankle, or foot</li> </ul>
	Stirrup splint	<ul style="list-style-type: none"> <li>• Ankle sprain</li> <li>• Isolated, nondisplaced fibular malleolar fracture</li> </ul>
Knee and lower leg	Posterior knee splint or knee immobilizer	<ul style="list-style-type: none"> <li>• Significant knee soft tissue injury</li> <li>• Bony injury of lower extremity (distal femur, patellar, proximal tibia fractures)</li> </ul>

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## Pelvic Inflammatory Disease: Diagnosis and Treatment in Urgent Care

### EB Medicine

#### KidBits: Pelvic Inflammatory Disease in Adolescents

Adolescents are more susceptible to PID for several reasons. Many adolescents are less diligent about using barrier contraception. Additionally, cervical ectropion exposes a large area of columnar epithelial cells, which are less resistant to infection by *N gonorrhoeae* and *C trachomatis*.<sup>111</sup> Maintain a high level of suspicion for PID in adolescents, as serious sequelae like infertility can develop after a single episode of PID.<sup>112</sup> Many clinicians fail to inquire about sexual activity in adolescents and thus fail to consider PID as an etiology for pelvic pain. There are no adjustments for the treatment of the adolescent with PID, and the decision to refer adolescents to the ED should be based on the same criteria as for adult patients.<sup>11</sup>

#### Risk Management Pitfalls for Management of Pelvic Inflammatory Disease

1. **“Yes, she could have had PID, but she looked so well that I discharged her and deferred treatment to primary care.”** All patients who have the clinical diagnosis of PID should have empiric therapy started. Initial presentation does not predict progression of the disease and, therefore, should not be used to determine who should have treatment initiated.
2. **“I gave a gram of azithromycin and a shot of ceftriaxone to treat her PID.”** There is no single-dose treatment of PID; standard treatment regimens last for 14 days. This particular regimen is used to treat cervicitis in the absence of signs and symptoms of PID; however, even for cervicitis, azithromycin is no longer the medication of choice. Failure to provide adequate duration of appropriate medication places the patient at risk for undertreatment and the development of a resistant organism.
3. **“When she returned for her recheck, I checked her records and saw that she had a negative *N gonorrhoeae/C trachomatis* test, so I stopped her medication and reassured her that she didn't have PID.”** A negative *N gonorrhoeae/C trachomatis* test cannot be used to rule out the possibility of PID. A cervical *N gonorrhoeae/C trachomatis* NAAT is a test of lower-tract disease and does not exclude the presence of an upper-tract infection. Additionally, the test does not test for anaerobes that are implicated in PID.
4. **“She had white blood cells on the urine microscopy, so I treated her for a urinary tract infection even though she had no dysuria.”** Patients with PID commonly have white blood cells on urine microscopy. Additionally, uterine tenderness can be mistaken for suprapubic tenderness due to cystitis. Patient risk

factors must always be considered, and the presence or absence of dysuria is not diagnostically specific to differentiate PID from a urinary tract infection.

5. **“She had no fever and a normal white blood cell count, so PID was ruled out.”** There are no laboratory tests or imaging modalities that have adequate sensitivity to exclude the diagnosis of PID. Laboratory tests and imaging are typically abnormal only with sicker patients. Over-reliance on laboratory testing will lead to missed diagnoses.
6. **“She came back with continued pain, so I refilled her pain medications.”** When a patient fails to show adequate response to treatment, you must first consider the need for parenteral treatment, development of a complication, and infection with a resistant organism. Consider additional testing with cervical culture, which would allow for the identification of a resistant organism. Additionally, strongly consider increased coverage of anaerobic organisms.
7. **“She had clue cells and white blood cells on her wet mount, so I treated her for bacterial vaginosis.”** The presence of bacterial vaginosis does not exclude the diagnosis of PID. Bacterial vaginosis can be associated with PID. In some cases, it may be due to direct ascension of anaerobic bacteria, while in other cases it may be secondary to the loss of mucosal immunity secondary to the bacterial overgrowth.
8. **“I told her that her PID was possibly due to an STI. I assumed that she understood that she should avoid any further sexual interactions with her partner.”** Patients with a diagnosis of PID should abstain from intercourse until the resolution of therapy and until after the partners have completed empiric treatment. This recommendation is true regardless of the cause of the PID. While it may seem intuitive, it is important to speak to the patient directly about the importance of partner treatment to prevent re-infection.
9. **“When I told her to see her doctor in two days, I assumed she would do it. If she didn’t have a doctor, she should have just come back to Urgent Care.”** Most patients with PID should have a clinical response within 48 to 72 hours. Many of the decision points are based on the response to treatment at this repeat visit, especially with regard to the need for imaging, changes in antibiotics, or need for parenteral therapy. Therefore, it is important that the patient has access to and understands the importance of the follow-up appointment.

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## Management of Acute Asthma Exacerbations in Urgent Care

### EB Medicine

#### Treatment

#### Oxygen

Oxygen is the first-line treatment agent in the management of hypoxic patients with undifferentiated dyspnea who have low saturations at the initial assessment. Judicious use of oxygen is recommended per Global Initiative for Asthma guidelines to achieve target oxygen saturation (SpO<sub>2</sub>) levels of 93% to 95% for adults with asthma.<sup>29</sup> Hyperoxia can have deleterious effects, and controlled oxygen therapy is associated

with lower mortality.<sup>13,29,32,33</sup> Oxygen can be administered via nasal cannula or mask with or without a rebreathing device, depending on patient preference, tolerance, and saturations during the initial assessment phase.

### Pharmacologic Agents

First-line medications for acute asthma exacerbations are SABAs, anticholinergics, and corticosteroids. Other medications should be considered as second- and third-line treatments. These pharmacologic agents are discussed in the following sections.

### Beta Agonists

Inhaled SABAs, such as albuterol, are first-line medications for acute asthma exacerbations, and are safe in high doses.<sup>13</sup> SABAs induce pulmonary smooth muscle relaxation, with a peak effect at 30 minutes.<sup>41</sup> The deleterious effects of SABA are tachycardia, tremors, and anxiety. Levalbuterol, the active enantiomer of albuterol, was not found to have any significant clinical advantages despite its higher cost, and it has largely fallen out of use.<sup>34</sup>

The 2023 report of the Global Initiative for Asthma, *Global Strategy for Asthma Management and Prevention, 2023*, recommends inhaled corticosteroids with long-acting beta agonists (LABAs) in moderate to severe asthma exacerbations.<sup>29</sup>

### Metered-Dose Inhalers Versus Nebulizers

Multiple studies have evaluated the efficacy of metered-dose inhalers (MDIs) and nebulizer treatment to determine the best mode of delivery. A Cochrane review analyzed 39 trials to compare efficacy of inhaled beta-2 agonist therapy delivered via MDI with spacer versus nebulization. The review demonstrated that MDI with spacer therapy, compared to nebulization, was not associated with a significant difference in hospital admission rates or length of stay for adults with mild to moderate asthma exacerbation. In children, the length of stay, tremor development, and pulse rate were significantly lower when using MDI with spacer compared to nebulizer treatment. The quality of this evidence was noted to be moderate.<sup>35</sup> The risk for transmission of respiratory pathogens also appears to be greater with the use of nebulization.<sup>36</sup> Given current health precautions with COVID-19 and resource utilization, we recommend use of MDI with spacer for Urgent Care treatment, if readily available, for patients with mild to moderate asthma.

### Intermittent Versus Continuous Nebulizer Treatments

Evidence shows that continuous beta agonist therapy may reduce the rate of hospitalization and improve pulmonary function in moderate to severe exacerbations.<sup>33,37,38</sup> A study of children hospitalized for severe asthma exacerbation demonstrated that continuous treatments were more successful than intermittent nebulization.<sup>39</sup> For adults, continuous nebulization is done by giving 5 to 10 mg of albuterol over 1 hour, as opposed to intermittent dosing of 2.5 mg every 30 minutes. Side effects may include nervousness, shakiness, headache, throat or nasal irritation and tachycardia. We recommend the use of continuous nebulization as safe and effective treatment for moderate to severe asthma exacerbations, while considering and setting up transport to the ED for continued management and monitoring.

### Anticholinergics

Inhaled anticholinergic medications promote smooth-muscle relaxation and bronchodilation.<sup>32</sup> The most used anticholinergic medication is ipratropium, with an onset of action within 15 minutes. Current evidence suggests that patients with acute asthma exacerbation treated with short-acting anticholinergics combined with SABA, instead of monotherapy with SABA, have better improvement in pulmonary

function and are less likely to be admitted to the hospital. This is particularly evident in patients with moderate to severe exacerbations.<sup>29,33,40</sup> Pediatric asthma patients have also been found to benefit from combination therapy with short-acting anticholinergics and SABA.<sup>41</sup> Patients receiving combination therapy may experience more adverse effects such as tremors, agitation, and palpitations;<sup>40</sup> however, ipratropium has a good safety profile and has been shown to be efficacious when administered along with SABAs. We recommend the use of 1 ipratropium dose with the first SABA treatment in patients with moderate to severe asthma exacerbations. In suspected COVID-19 infection, we suggest MDI with spacer; otherwise, both nebulizer and MDI options are equally effective.

### Corticosteroids

Systemic corticosteroids are an essential first-line component of acute asthma exacerbation management. They reduce airway inflammation and may be administered via IV, oral, or inhaled routes. Evidence suggests that IV, intramuscular (IM), and oral routes have equivalent effects and bioavailability in most patients. IM and oral administrations are typically readily available in the Urgent Care setting and are less expensive and invasive than IV administration.<sup>13,16,29,32</sup> IM injections do carry some additional risks, including pain, infection, traumatic fat necrosis, hematoma, nerve injury, and muscle wasting. Oral administration is easy and effective, with fewer potential side effects than IM, if the patient can swallow and tolerate oral intake. Inhaled corticosteroids are considered a mainstay of treatment for chronic asthma but are not effective for acute exacerbations.<sup>42</sup> A Cochrane review found that corticosteroids administered within 1 hour of presentation significantly reduced hospitalization rates, especially in patients with severe exacerbations.<sup>43</sup> Continuing oral corticosteroids after discharge has been shown to reduce the rate of repeat ED and Urgent Care visits.<sup>13,26</sup>

The standard of care for patients discharged after presentation for acute asthma exacerbation has included 3 to 10 days of oral corticosteroids, usually prednisone or prednisolone.<sup>13,29</sup> However, since 1997, multiple randomized controlled trials in the pediatric literature have demonstrated that 1 or 2 doses of oral dexamethasone are equivalent to a 5-day regimen of prednisone/prednisolone in preventing relapse.<sup>44,45</sup> Dexamethasone has a longer half-life than prednisone (36-72 hours vs 12-36 hours), and is better tolerated, with a lower incidence of vomiting. A 2014 meta-analysis incorporating 6 of these pediatric studies demonstrated no difference in relative risk of relapse at any of the endpoints used in these studies (5 days, 10-14 days, or 30 days).<sup>44</sup> Most recently, Cronin et al compared a single dose of oral dexamethasone to 5 days of prednisolone in children and found no difference in symptoms at day 4, or in rate of admission or return to a provider within 14 days.<sup>45</sup> Both of these studies showed a lower rate of vomiting among patients in the dexamethasone arm.

Regarding adult patients, the literature is not as robust, although there have been several recent studies demonstrating equivalence of oral dexamethasone to prednisone. Kravitz et al compared 2 days of oral dexamethasone (1 dose in the ED and 1 dose 24 hours later) to 5 days of oral prednisone. They found no difference in relapse at 14 days and an earlier return to normal activities in the dexamethasone group.<sup>46</sup> A noninferiority trial by Rehrer et al comparing 1 dose of oral dexamethasone, given in the ED, to 5 days of oral prednisone barely failed to demonstrate noninferiority of dexamethasone.<sup>47</sup> The upper limit of the confidence interval favored prednisone by 8.6%, while the noninferiority margin was preset at 8%. Still, the authors concluded that the convenience to patients and improved compliance of 1 ED dose of dexamethasone would likely translate to equivalence of the 2 treatment regimens.

We feel that the literature supports 1 or 2 doses of oral dexamethasone in pediatric patients as a viable option for patients discharged after an acute exacerbation. For adult patients, dexamethasone needs

further study, but it can be considered an option for patients with mild exacerbations and good follow-up.

### Magnesium Sulfate

Magnesium sulfate, although not available in most Urgent Care clinics, can treat asthma through anti-inflammatory effects, smooth muscle relaxation, and bronchodilation.<sup>48</sup> It is generally administered intravenously and has a rapid onset of action and rapid renal clearance.<sup>49</sup> A Cochrane review with a high quality of evidence illustrated that IV magnesium sulfate administered for acute exacerbations significantly reduced hospital admission rates in patients who did not respond adequately to standard treatment. It demonstrated a reduction of 7 hospital admissions for every 100 patients treated. Adverse effects reported consisted of flushing, fatigue, headache, and hypotension.<sup>50</sup> Patients included in all studies were of at least moderate severity. Inhaled magnesium sulfate has shown potential benefit without serious adverse events;<sup>51</sup> however, the efficacy of treatment remains uncertain.

Pediatric literature also demonstrates improvement with administration of magnesium sulfate. Multiple studies have demonstrated improvement in pulmonary function, reduced hospital admission rate, and shorter length of stay in pediatric patients treated with IV magnesium sulfate along with standard treatment. This treatment is typically provided during moderate to severe exacerbations.<sup>52-55</sup> IV magnesium sulfate was also shown in one study to be cost-effective in the treatment of asthma exacerbations.<sup>56</sup>

### Epinephrine

Epinephrine is a potent bronchodilator secondary to beta-2 agonist activity and may reduce mucus production, airway edema, and inflammation via alpha-1 agonism.<sup>40</sup> Epinephrine may be considered in severe asthma, or under certain defined conditions such as exacerbations related to anaphylaxis or angioedema, by national and international consensus guidelines,<sup>13,29</sup> but is not recommended for routine, first-line treatment. Many researchers and clinicians recommend that it be considered in severe, life-threatening asthma, by IM, nebulized, or IV route.<sup>32,57,58,59</sup>

Nonetheless, there is not a substantial body of high-quality evidence to support the addition of epinephrine to standard treatments in the management of severe asthma. A systematic review and meta-analysis of 38 studies, involving over 2200 patients, found no difference in rate of treatment failure for epinephrine by any route as compared to selective beta-2 agonists by any route.<sup>60</sup> In addition, the researchers found a low certainty of evidence due to a high incidence of bias and high degree of heterogeneity of the studies. None of the studies evaluated the addition of IM epinephrine to standard treatments, and the 2 studies that evaluated subcutaneous epinephrine in addition to standard care found no evidence of added benefit.

Several studies have evaluated the risk for adverse events from parenteral epinephrine in the treatment of severe asthma.<sup>61-63</sup> These studies found some minor adverse effects (anxiety, palpitations, nausea) and some episodes of transient, uncomplicated hypertension and/or tachycardia, but minimal incidence of clinically significant adverse effects. Each of these studies concluded that epinephrine was safe to use in severe asthma.

Given its favorable safety profile, we recommend the use of epinephrine (0.3-0.5 mg of 1 mg/mL concentration given IM into the anterolateral thigh) for severe, life-threatening asthma that is not responding to standard treatments, or if suspected to be related to anaphylaxis and/or angioedema. The IM route is preferred over the subcutaneous route.<sup>32,59</sup> For patients who are profoundly hypotensive or

refractory to IM treatment, IV epinephrine may be considered, at a dose of 5 to 20 mcg every 2 to 5 minutes, followed by an infusion of 0.1 to 0.5 mcg/kg/min.<sup>59</sup> For this situation, referral and transfer via EMS to the nearest ED should be performed immediately. Additionally, we feel that further prospective studies are needed to evaluate the efficacy and safety profile of parenteral epinephrine in these patients.

## Special Populations

### Pregnant Patients

Asthma is the most common respiratory condition in pregnancy, affecting 5% to 8% of pregnancies in the United States and 8% to 13% worldwide.<sup>64,65</sup> It is associated with increased risk for pregnancy-induced hypertension, pre-eclampsia, gestational diabetes, placenta previa, placental abruption, postpartum hemorrhage, preterm birth, and low birth weight.<sup>64-68</sup> Poorly controlled asthma increases the likelihood of these complications.

Management of asthma in pregnancy is the same as for nonpregnant patients.<sup>69</sup> None of the standard asthma medications has been shown to pose a risk to the fetus; however, it is estimated that up to 40% of pregnant patients are noncompliant with asthma treatments.<sup>65</sup> Well-controlled asthma can lead to normal maternal and fetal outcomes, and it is incumbent on clinicians to manage pregnant asthma patients appropriately.<sup>66,70</sup>

### Asthma Patients With COVID-19

According to the United States Centers for Disease Control and Prevention (CDC), “people with moderate to severe asthma may be at higher risk of getting very sick from COVID-19,” because COVID-19 can cause asthma attacks and possibly lead to pneumonia or acute respiratory disease.<sup>71</sup> However, multiple studies have shown a low prevalence of asthma among patients with severe COVID-19, when compared to those with non-severe disease or the general population.<sup>72-75</sup> Furthermore, studies have shown that patients with asthma and COVID-19 do not have higher rates of admission, ICU admission, or mortality.<sup>73,75-79</sup>

Although some have argued that the use of inhaled corticosteroids may lead to a decreased expression of the angiotensin converting enzyme 2 (ACE2) receptor, which is thought to be a major entry point of the virus into human cells, the clinical significance of this remains unclear.<sup>74,75,80</sup>

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# Urgent Care Q&A

## 20 Questions (and Answers) About Strep Pharyngitis

Michael Weinstock, MD & Gita Pensa, MD  
UCMax

### 1. What infectious organisms can cause pharyngitis?

- Viruses
- Bacteria
- Fungi

### 2. What are non-strep causes of throat pain?

- Peritonsillar abscess
- Gonorrhea
- Retropharyngeal abscess
- Diphtheria (more common in Russia)
  - Epiglottitis – Now a disease of adults that presents more gradually
- Herpes simplex virus
- Mononucleosis
  - Post-cervical lymphadenopathy (LAN)
  - Fatigue
  - Splenomegaly
- Mechanical1.
  - Foreign body
  - Mass
- Allergic rhinitis
- Cancer of the head and neck
- Gastroesophageal reflux disease

### 3. What is the specific name for the bacteria that causes strep?

- Group A strep pharyngitis (caused by *Streptococcus pyogenes*)
- Exhibits complete hemolysis (beta hemolysis) when grown on agar
- Part of the group A Lancefield classification system
- Name: Group A beta hemolytic strep (GABHS)

### 4. What are historical features of GABHS pharyngitis?

- Sore throat
- Pain with swallowing
- Fever
- Other: Headache, abdominal pain, nausea/vomiting (in children)
- Note: Do not have cough, rhinorrhea, oral ulcers, conjunctivitis

### 5. What are the exam findings of GABHS?

- Erythema pharynx and tonsils
- Tonsillar hypertrophy
- Exudates (not always present)
- Palatal petechiae (up to 95% specific for GABHS)
- Anterior cervical lymphadenopathy

### 6. What are the Centor criteria?

- Fever

- Anterior cervical LAN
- Tonsillar exudate
- No cough

**7. What is the risk of strep throat based on the Centor criteria?**

- If all 4 are present (score = 4), risk of GABHS is 51%-53%
- If none are present (score = 0), risk of GABHS is 1%-2.5%

**8. How is strep transmitted?**

- Spread directly from person to person from respiratory droplets, saliva, nasal secretions
- More likely to spread from symptomatic compared to asymptomatic carriers
- Increased in schools, daycare centers, military training facilities
- Pets CANNOT transmit
- Decreased ability to transmit after 12 hours of antibiotics
- Centers for Disease Control and Prevention (CDC) recommends staying home until (1) afebrile, AND (2) 12-24 hours after starting antibiotics

**9. What is the incubation period?**

- 2-5 days

**10. In what groups is testing not routinely indicated?**

- Children younger than 3 years
- Adults
- Note: Acute rheumatic fever (ARF) is very rare in the above age groups
- Note: GABHS is most common in patients 5-15 years old

**11. When should a culture be done?**

- In children, a culture is recommended if the rapid antigen detection test (RADT) is negative
- In adults, a culture is not recommended
- (Culture may not be necessary with rapid PCR - more sensitive than antigen testing)

**12. What are the suppurative complications of GABHS?**

- Acute rheumatic fever
- Peritonsillar abscess
- Mastoiditis
- Cervical lymphadenitis

**13. Why do we treat GABHS?**

- Shortens duration of symptoms (per CDC). Note: CDC confirms that symptoms are usually self-limited
- Reduces transmission
- Prevents complications (suppurative complications)

**14. Who should not be treated?**

- Patients with viral or noninfectious pharyngitis

**15. Which antibiotics should be used?**

- There has never been a report of a clinical isolate of group A strep that is resistant to penicillin (PCN); cephalosporins are reasonable in PCN-allergic patients
- Resistance to azithromycin (rising resistance levels) and clarithromycin common in some communities

**16. What dose of PCN should be used?**

- PCN: Children 250 mg twice a day (BID) or 3 times a day (TID), adults 250 mg 4 times a day (QID)
- Amoxicillin: 50 mg mg/kg once a day (QD) or 25 mg mg/kg BID

**17. What is the duration of therapy?**

- 10 days (recent studies suggest that 5 days may be nearly as good)

**18. Which antibiotic should be used in patients with a PCN allergy?**

- Narrow-spectrum cephalosporins, clindamycin, azithromycin

**19. Should those with asymptomatic group A strep (carriers) be treated?**

- Asymptomatic group A strep carriers usually do not require treatment. Carriers will likely have a positive throat culture or be RADT positive, but do not have clinical symptoms or an immunologic response. Carriers are much less likely to transmit and are also very unlikely to develop suppurative or nonsuppurative complications.
- A patient with viral pharyngitis may test positive for strep but be a carrier. Repeated use of antibiotics in the group is unnecessary. The Infectious Diseases Society of America (IDSA) has more information on identifying carriers.

**20. Is the risk of post-strep glomerulonephritis decreased with antibiotics?**

- No. This is a nonsuppurative sequela that occurs after the original infection and is thought to be from an immune response, not from the direct group A strep infection.

**References:**

Pharyngitis (Strep Throat). Centers for Disease Control and Prevention.

<https://www.cdc.gov/groupastrep/diseases-hcp/strep-throat.html#:~:text=Clinical%20features,-Group%20A%20strep&text=Other%20symptoms%20may%20include%20headache,strongly%20suggest%20a%20viral%20etiology> (Last Reviewed: June 27, 2022)

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This information is peer-reviewed but should not be your only source. Providers of care should use discretion when applying knowledge to any individual patient.

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## Urgent Updates



### **Rocky Mountain Spotted Fever in Mexico**

The CDC cautions travelers to Mexico about Rocky Mountain spotted fever. The Centers for Disease Control and Prevention is warning people who are traveling to the Baja California region of Mexico to watch out for ticks that could spread Rocky Mountain spotted fever. The travel advisory comes after a person from San Diego died from the disease. **Full Access:** [CDC](#)

### **CDC Urges Doctors, Health Departments to Bolster Surveillance of More Severe Mpox Strain**

The Centers for Disease Control and Prevention (CDC) is issuing this Health Alert Network (HAN) Health Advisory to notify clinicians and health departments about the occurrence, geographic spread, and sexually associated human-to-human transmission of Clade I Monkeypox virus (MPXV) in the Democratic Republic of the Congo (DRC). MPXV has two distinct genetic clades (subtypes), and cases of Clade I MPXV have not been reported in the United States at this time (a clade is a broad grouping of viruses that has evolved over decades and is a genetic and clinically distinct group). However, clinicians should be aware of the possibility of Clade I MPXV in travelers who have been in DRC. **Full Access:** [CDC](#)

### **Appendicitis Risk Higher for Preterm Infants in First Year of Life**

In this retrospective, multicenter, matched case-control study, researchers found that preterm infants have an increased risk of appendicitis during the first year of life. A preterm birth history may help improve the timely diagnosis of infantile appendicitis. **Full Access:** [AAP](#)

### **Flu, Respiratory Viruses Rise for 4th week, Pediatric Deaths up: 8 FluView Notes**

For a fourth week in a row, the number of cases of respiratory illnesses are above average in eight of 10 CDC regions, and flu hospitalizations have also gone up again. There were 4,268 patients admitted to hospitals across the U.S. with confirmed flu cases, according to the CDC's latest data for the week ending Nov. 25, up from 3,296 admissions the week prior. **Full Access:** [Becker's Hospital](#)

### **New Syndrome May Be Affecting Babies Exposed to Fentanyl**

Doctors report they are seeing what they think is a new syndrome in babies who are exposed to fentanyl while in the womb. All of the infants have cleft palates and unusually small heads, and all were born to mothers who said they had used fentanyl and other drugs while pregnant. **Full Access:** [Healthday](#)

### **Recommendations Developed for Sport-Related Concussion in Children**

In a consensus statement issued by the International Consensus Conference on Concussion in Sport and published online Dec. 4 in *Pediatrics*, recommendations are presented for managing sport-related concussion among children and adolescents. The authors note that lower SRC rates are seen with prevention strategies, including use of mouth guards, policies disallowing bodychecking in ice hockey, and neuromuscular training in rugby among adolescents. **Full Access:** [Healthday](#)

### **5 Conditions MS Patients May Have Years Before Diagnosis**

People with multiple sclerosis (MS) are more likely to experience depression, sexual dysfunction, constipation, inflammation of the bladder, and urinary tract infection in the five years leading up to their diagnosis than those without the disease, a study found. These findings parallel growing evidence that there's a prodromal phase, in which certain unspecific symptoms become evident, sometimes years before the classic symptoms of MS emerge. **Full Access:** [Multiple Sclerosis](#)

### **Venous Thromboembolism with Use of Hormonal Contraception and Non-Steroidal Anti-Inflammatory Drugs: Nationwide Cohort Study**

NSAID use was positively associated with the development of venous thromboembolism in women of reproductive age. The number of extra venous thromboembolic events with NSAID use compared with non-use was significantly larger with concomitant use of high/medium risk hormonal contraception compared with concomitant use of low/no risk hormonal contraception. Women needing both hormonal contraception and regular use of NSAIDs should be advised accordingly. **Full Access:** [PubMed](#)

## **Urgent Updates in Pediatrics**

### **Ivan Koay MD, MBChB, MRCS, FRNZCUC**

Urgent Care Physician and Medical Lead Kings College Hospital Urgent Treatment Centre, London  
Abstracts Section Editor, Journal of Urgent Care Medicine  
Convenor Ireland and UK Faculty of the Royal New Zealand College of Urgent Care  
Independent Assessor European Reference Network, Andalusian Agency for Healthcare Quality

### **Risk of hematological malignancies from CT radiation exposure in children, adolescents, and young adults.** Nat Med (2023). [Bosch de Basea Gomez, M., Thierry-Chef, I., Harbron, R. et al.](#)

What is the risk of radiation exposure to children during investigative procedures such as CT? The EPI-CT study was set up to overcome limitations of previous studies and improve direct estimates of cancer risk from low-dose radiation exposure from CT scanning in childhood and adolescence. It included 948,174 individuals from nine European countries.

The authors found that a typical CT scan today increases the risk of developing lymphoid or myeloid malignancies by about 16%. This means that among 10,000 children who receive one CT examination, about 1–2 radiation-associated hematological malignancies are expected to occur during the 12 years after the examination. The findings highlight the need for raising awareness in the medical community and continued strict application of radiological protection measures in medical settings through justification and optimization of radiological procedures, particularly in pediatric populations.

[CLICK HERE TO READ MORE](#)

**Race, Ethnicity, Language, and the Treatment of Low-Risk Febrile Infants JAMA: November 2023**

Gutman D, Aronson P, Singh N, et. al.

In fast-paced medical facilities such as UCCs and EDs, clinicians are at risk of implicit bias which can lead to health inequalities. This was a multicentered cross-sectional study of well appearing infants determined to be at low risk of invasive bacterial infections during evaluation for fever. Primary outcomes were the receipt of at least 1 additional intervention: lumbar puncture, empirical antibiotics, or hospitalization. The authors assessed race and ethnicity as a predictor using a 4-level variable (non-Hispanic Black, hereafter referred to as Black; Hispanic; non-Hispanic White, and another race or ethnicity).

The authors found there was no overall association between infant race and ethnicity and the use of at least one additional of the included interventions; however, having a caregiver who used a language other than English for medical care was associated with the use of at least 1 additional intervention contrary to evidence-based recommendations. This study highlights the importance of considering language used for medical care when assessing equity.

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## Spotlight On Our Members

### Lena Esmail, APRN, DNP

*Contributor: Sarah Alasya, Medline National Accounts Director – Urgent Care*

When a hospital operating for nearly 90 years in Youngstown, Ohio, closed permanently in 2018, the residents – a notable percentage of whom are covered by Medicaid – were rightfully concerned about how the closure would affect their access to healthcare in the area.

As an emergency department and Urgent Care clinician serving Youngstown and neighboring communities, Lena Esmail, APRN, DNP and now CEO of QUICKmed Urgent Care, transformed her personal and professional concerns about the closure into action -- with a goal of not only maintaining, but also improving access to healthcare in the area. With a business partner, Esmail opened a stand-alone Urgent Care a mile away from the closed hospital.

Over the last five years, one QUICKmed location in Liberty, Ohio, has grown in the region into 12 (soon to be 14) standalone UC centers; as well as seven (soon to be 8) school-based locations.

QUICKmed provides walk-in medical treatment for non-emergency health issues. Services include well visits, sick visits, medication refills, lab testing, x-rays, immunizations and others. Several locations also offer primary care and occupational health services. QUICKmed runs its own COLA-certified complex laboratory that can return same-day results for its locations. In addition, QUICKMed operates a mobile unit that provides dental services to Youngstown students.

It is QUICKmed's innovative school-based locations - called YOUcare clinics - that have made local headlines and launched the Esmail's and QUICKmed's growth and reputation for compassionate and quality healthcare in the Northeastern Ohio communities it serves.

"At our first stand-alone UC center, we immediately started seeing kids coming in for physicals and vaccinations – not typical for Urgent Care services," Esmail said. "When we asked why they weren't going to their pediatricians, we learned that there were no pediatricians in Youngstown at the time; that available appointments for doctors in other communities were 3-4 month waits; and that transportation schedules were impossible to align with appointments."

With these and other barriers to healthcare access in mind, Esmail reached out to the superintendent of Youngstown city schools about opening clinics on campus and around school districts.

"The need was clear," Esmail said. "And, there's no disputing that wraparound services that include healthcare directly relate to success in school. We knew if we could bring healthcare to where the kids were, we could positively impact social determinants of health."

Success with Youngstown schools led to programs in other nearby districts. In 2021, working with Salem City and Liberty local schools, QUICKmed became the only for-profit organization to receive grant money from the Ohio Department of Health to expand school-based health centers.

New QUICKmed stand-alone locations are being selected based on need and which schools have on-campus clinics -- and vice versa. Occupational health services are also being offered in districts that house school-based clinics, expanding access to quality care and helping to offset costs.

Esmail leverages grant-funding, public-private partnerships and other payer networks to support operations and admits that QUICKmed runs a lean ship.

“Our social mission is to provide healthcare to as many people as we are able. We pay our team members well and we operate safe and nice-looking healthcare facilities,” Esmail said. “Which doesn’t leave a lot of room for bells-and-whistles.”

Esmail points to the importance of working with strong partners who understand and support Quickmed’s social mission and vision and who can help the provider be more efficient without sacrificing quality of care. Esmail cited its prime vendor agreement with Medline as an example of a partnership that enables the provider’s growth.

Esmail noted Medline’s knowledge of Urgent Care settings and strategic flexibility that allows QUICKMed to continue to innovate in the space.

“Growth for UC comes down to trust and transparency with your partners,” Esmail said.

Along with opening additional school-based locations, QUICKmed is expanding its capabilities by converting Urgent Care sites to Urgent Care/primary care centers and exploring partnerships with other healthcare systems that will facilitate specialty care more adequately and help maintain a cycle of care for its patients.

## Cause for Applause Q4 2023—The College’s Newest Fellows



We would like to welcome the following new fellows of the College of Urgent Care Medicine! These fellows represent the best of us who work every day to provide the highest quality of medicine and advance the specialty of Urgent Care Medicine. The following individuals applied and earned the distinction of Fellow in the College of Urgent Care Medicine since our last announcement in June 2023.

Stephen Bajko, PA-C, MBA, FCUCM  
Hong Keun Choi, MD, MPH, FAACEP, FAAEM, FCUCM  
Ajsa Nikolic, MD, MHA, FCUCM

Do you want to be recognized? Requirements to become a fellow include actively practicing as a physician, PA, or NP with a solid foundation in Urgent Care and being an active member of CUCM for at least one year. Further requirements can be found [here](#). Those who achieve fellowship status will be entitled to use the initials FCUCM for as long as they remain members of the College.

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## **CONTINUING MEDICAL EDUCATION (CME)**

### **Target Audience**

This CME activity is intended for medical professionals who practice medicine in the on-demand space including Urgent Care, retail medicine and other similar venues. These providers may include physicians, nurse practitioners, and physician assistants.

### **Designation Statement**

The Urgent Care Association (UCA) designates this enduring material activity for a maximum of 3 AMA PRA Category 1 Credit(s)<sup>™</sup>. Physicians should claim credits only commensurate with the extent of their participation in the activity. Credits may be claimed for one year from the date of release of this issue.

### **CME Objectives**

1. Provide updates on the diagnosis and treatment of clinical conditions commonly managed by on-demand clinicians
2. Alert on-demand providers to potential unusual cases that may present to them
3. Utilize tips and tricks to improve patient care in the on-demand space

### **Accreditation Statement**

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

### **CME Credit Instructions**

Once you have read the article, please log into your UCA profile. Once you are logged in go to Learn->CME->Request CME. Complete the survey with the requested information for Urgent Caring. Your certificate will then be emailed to you within 3-5 business days. Please email [learning@urgentcareassociation.org](mailto:learning@urgentcareassociation.org) with questions.

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This list provided in the article is just a start for how we can compassionately approach underserved populations in Urgent Care. What are some of your ideas? We'd love to hear them in the comments!

For more on this topic, check out the "Caring for the Underserved" series in Urgent Care Reviews and Perspectives. [Listen today!](#)



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