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JUNE 2015

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VOLUME 9, NUMBER 9

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Maintenance of Certification: A Punch in the Gut



n an era of plummeting leverage and influence over health care and the well-being of our practices and patients, physicians desperately need representation. Our collective voice has been muzzled when it comes to health-care delivery and eco-

nomics. We have been relegated to serving as the voice of public health and clinical best practice, nothing more. How did we get here, and what are our representatives in our professional organizations doing to overcome this situation?

In previous columns I have discussed the nearly unbearable regulatory and compliance environment we are forced to practice within. Most of these conditions have been imposed on us by outside forces with self-serving agendas. Surely our own physician societies are fighting hard to regain control over our profession and to push back against the undue burden and suffocating weight of rules and requirements? Well, unfortunately not. In an almost unfathomable move, boards that are members of the American Board of Medical Specialties (ABMS) have added to our hardship by bloating the certification process with requirements for maintenance of certification (MOC) and recertification that for most physicians are simply too much keep up with. And yet, despite the dearth of evidence that these added requirements improve outcomes, protect the public, or make better physicians, we remain subject to the added load.

I have bemoaned MOC before, but a new physician survey from *Medical Economics* has me freshly infuriated: http:// medicaleconomics.modernmedicine.com/medical-economics/ news/poll-primary-care-physicians-say-moc-does-not-makethem-better. Of the 2000-plus physicians surveyed, 96% expressed dissatisfaction with MOC, and 95% proclaimed that it does not make them a better physician. A full 75% feel that there should be an alternative way of achieving board certification that does not require testing at all. Despite the nearly unanimous dissent of physicians, our own member societies have ruled otherwise. There are only two possible explanations for why our elected leaders would so blatantly betray us: money or ego. Or is it both?

In clinical research on physicians, *ego bias* is defined as systematic overestimation of the prognosis of one's own patients

compared with the expected outcome of a population of similar patients. It seems like ABMS board members have overestimated their own wisdom and ability to establish the qualifications necessary to certify the most capable physicians. If that is not the case, then perhaps this is all about money. Consider this: The American Board of Internal Medicine spent \$53 million on MOC in 2013. About half of that went to "exam development, administration, and exam delivery." That's \$25 million worth of self-serving influence. Then there's the American Academy of Family Physicians, with its \$100 million annual budget and a bushel of executives paid annual salaries well over \$300,000, flying first class (with their families) hither and thither across the country to attend board meetings.

Where did we go wrong? Well, when you elect an unpaid board of directors to a "nonprofit" organization, and have them serve 1- to 2-year terms, the only consistent voice is really from the executives with money and power and the will to use those tools in their self-interest. Have a different idea for how things should go? It's like the "rogue" Democrat or Republican looking to "reform" an entrenched party with special-interest hands in their pockets. You know how that turns out.

The only way forward is for physicians to collectively expose their specialty societies for their failure to represent. The good news is that this is actually starting. The National Board of Physicians and Surgeons is a splinter group aiming to make board certification more rational. The American Board of Physician Specialties has a similar goal. Both are gaining acceptance with disgruntled physicians and, perhaps more importantly, with payors and hospitals. Perhaps the urgent care community and its representatives should rally around one or both so that we too can have a home that allows us to practice our chosen discipline without the absurdity of MOC within a specialty we no longer practice. Imagine that!

Lee A. Resnick, MD, FAAFP Editor-in-Chief, JUCM, The Journal of Urgent Care Medicine



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CLINICAL

9 Shoulder Pain in the Urgent Care

Shoulder pain is not always "just another musculoskeletal complaint." It may be referred pain indicating life-threatening conditions. *Mizuho Spangler, DO, and Michael B. Weinstock, MD*

Shoulder pain, computer artwork.

PRACTICE MANAGEMENT



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Integrated health systems can improve access and clinical outcomes and reduce patients' costs. *Alan A. Ayers, MBA, MAcc*

CASE REPORT

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Foreign-body insertion is common in toddlers and has potentially serious consequences.

May Mohty, MD, FAAP, FAAUCM, and Jacob Anderson, DO



IN THE NEXT ISSUE OF JUCM

The ubiquity of smartphones with audio and video recording capabilities increases the chances that patients will openly or covertly record interactions with physicians. In our Practice Management section, experts will spell out the legal and privacy implications so that you can develop appropriate policies and training for your urgent care center.

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bnapolitano@jucm.com ART DIRECTOR Tom DePrenda tdeprenda@jucm.com

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P U B L I S H I N G 120 N. Central Avenue, Ste 1N Ramsey, NJ 07446

PUBLISHERS Peter Murphy pmurphy@braveheart-group.com • (201) 529-4020

Stuart Williams

swilliams@braveheart-group.com • (201) 529-4004 CLASSIFIED AND RECRUITMENT ADVERTISING Classified@iucm.com

Pete Murphy - (201) 529-4020 • Stu Williams - (201) 529-4004

Mission Statement

JUCM The Journal of Urgent Care Medicine supports the evolution of urgent care medicine by creating content that addresses both the clinical practice of urgent care medicine and the practice management challenges of Keeping pace with an ever-changing healthcare marketplace. As the Official Publication of the Urgent Care Association of America and the Urgent Care College of Physicians, JUCM seeks to provide a forum for the exchange of ideas and to expand on the core competencies of urgent care medicine as they apply to physicians, physician assistants, and nurse practitioners.

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JUCM CONTRIBUTORS

ven though most patients with shoulder pain have sustained trauma to or have injured their rotator cuff or glenohumeral joint through overuse,



such pain is not always what it seems. In our cover article, authors Mizuho Spangler, DO, and Michael B. Weinstock, MD, take you through a stepwise approach to evaluating patients with shoulder pain, to help you quickly determine the cause: traumatic versus nontraumatic, intrinsic versus extrinsic, and glenohumeral or extra-glenohumeral. It is vital to determine whether there are life-threatening or limb-threatening issues present, especially because many patients rely on urgent care centers as their point of entry to health care.

Spangler is Assistant Professor of Emergency Medicine, LAC+USC Medical Center Department of Emergency Medicine, Los Angeles, California, and Executive Editor, Audio CME Program, *Urgent Care: Reviews and Perspectives* (*UC:RAP*). Weinstock is Adjunct Professor of Emergency Medicine, Department of Emergency Medicine, Ohio State University College of Medicine; Chairman and Director of Medical Education, Mount Carmel St. Ann's Hospital Department of Emergency Medicine, Columbus, Ohio, Immediate Health Associates, Inc.; and Editor-in-Chief, *UC:RAP*.



This month's case report concerns a 3-year-old child who presented with periorbital cellulitis with no obvious cause and an unexplained nosebleed.

Authors May Mohty, MD, FAAP, FAAUCM, and Jacob Anderson, DO, write that a high index of suspicion is essential when treating young children, because unwitnessed foreign-body insertion is common in this age group and has potentially serious consequences.

Mohty is a clinical assistant professor at the University of Arizona College of Medicine–Phoenix in Arizona and an urgent care physician at CIGNA Healthcare of Arizona. Anderson is a third-year resident and current chief resident at Banner–University Medical Center Phoenix Family Medicine Residency in Phoenix, Arizona.

As the U.S. health-care system evolves, individual providers, ancillary facilities, urgent care centers, hospitals, and payers are joining together in connected systems based on a shared medical record



and fixed reimbursement per patient. This month's Practice Management feature, by Alan A. Ayers, MBA, MAcc, is an exclusive interview with the chief executive officer of an integrated health system in Utah that is reducing overall health expenditures using risk models based on patient outcomes.

Ayers is on the board of directors of the Urgent Care Association of America, is associate editor of the *Journal of Urgent Care Medicine*, and is vice president of Concentra Urgent Care.

Welcome!

We are pleased to welcome **Michael B. Weinstock, MD**, to our staff as associate clinical editor. He has written many case reports and clinical review articles for us over the years and is a coauthor of the popular *Bouncebacks!* series of books that educates physicians on evaluation and risk management for common emergency and urgent care presentations. He will help shape our clinical content.

Also in this issue:

John Shufeldt, MD, JD, MBA, FACEP, has brought readers commentary through our Health Law column for nearly a decade now. He is retiring as the column's regular contributor, but this month he shows us where the urgent care profession has been and what we need to do to so that we function within and not outside of the health-care continuum.

Sean M. McNeeley, MD, and the Urgent Care College of Physicians review new abstracts from the literature on the prognostic value of troponin, potentially deadly drug interactions, cephalosporin allergies, the efficacy of β -lactam for pneumonia, new head lice treatment guidelines, and steroids and allergic relapses.

In Coding Q&A, **David Stern, MD, CPC**, discusses coding for intravenous therapy: infusions, pushes, and hydration.

Our Developing Data piece provides information on the incidences of the prevalence of assorted diagnosis codes at U.S. urgent care centers.

To Submit an Article to JUCM

JUCM, The Journal of Urgent Care Medicine, encourages you to submit articles in support of our goal to provide practical, up-to-date clinical and practice management information to our readers—the nation's urgent care clinicians. Articles submitted for publication in **JUCM** should provide practical advice, dealing with clinical and practice management problems commonly encountered in day-to-day practice.

Manuscripts on clinical or practice management topics should be 2600–3200 words in length, plus tables, figures, pictures, and references. Articles that are longer than this will, in most cases, need to be cut during editing.

We prefer submissions by e-mail, sent as Word file attachments (with tables created in Word, in multicolumn format) and individual image files, to *editor@jucm.com*. The first page should include the title of the article, author names in the order they are to appear, and the name, address, and contact information (mailing address, phone, fax, e-mail) for each author.



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FROM THE CHIEF EXECUTIVE OFFICER

Annual Meeting and Election News

P. JOANNE RAY

The 11th National Urgent Care Convention in Chicago attracted more than 1280 attendees: urgent care practitioners, center owners, administrators, exhibitor representatives, and investors. The expanded and sold-out exhibit hall hosted 178 companies showcasing urgent care products, services, and technologies.

During the meeting, new UCAOA leaders were elected, including the following:

- President, Robert Kimball, MD, FCFP
- President-Elect, Steve Sellars, MBA

Treasurer, Roger Hicks, MD

Secretary, John C. Kulin, DO, FACEP

New directors joining the board are Logan McCall, MBA, and Damaris Medina, Esq.

For the first time ever, a runoff election was held because of a tie vote. Results will be published in our e-newsletter, UCAccess.

Watch for additional meeting highlights, details on awardees, and photos via *UCAccess* and the UCAOA website: www.ucaoa.org.



1. Immediate Past President Nathan P. Newman, MD, FAAFP, passes the gavel to Robert R. Kimball, MD, FCFP. 2. President-Elect Steve Sellars, MBA; Chief Executive Officer Joanne Ray; and President Robert R. Kimball, MD, FCFP. 3. New board member Damaris Medina, Esq. 4. A packed audience enjoyed Sally Hogshead's opening keynote address, "From First Impressions to Lasting Value." 5. New board member Logan McCall, MBA.



P. Joanne Ray is chief executive officer of the Urgent Care Association of America. She may be contacted at *jray@ucaoa.org*.

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Analytics also cuts down on end-of-month closing because our accountant can pull reports within minutes instead of hours."

-BRANDON PENICK Chief Operating Officer First Med Urgent Care



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Clinical

Shoulder Pain in the Urgent Care

Urgent message: Shoulder pain is not always "just another musculoskeletal complaint." It may be referred pain indicating life-threatening conditions. Many patients use urgent care centers as sources of primary care. Thus when we make an important diagnosis because of our methodical, stepwise approach to examination, we have the opportunity to be the providers who ultimately expedite diagnosis and care for these patients.

MIZUHO SPANGLER, DO, and MICHAEL B. WEINSTOCK, MD

houlder pain is the third most common musculoskeletal complaint seen in outpatient clinics in the United States, with more than 14.7 cases per 1000 persons reported each year.¹ The most common causes of shoulder pain are trauma or overuse injuries involving the rotator cuff or within the glenohumeral joint itself.^{1,2}

Although in the vast majority of patients who present to urgent care centers for shoulder pain there is an underlying musculoskeletal etiology, we as clinicians must recognize that there are many potentially catastrophic diagnoses that can present as referred pain to the shoulder, including myocardial infarction, aortic dissection, hemoperitoneum from solid organ injury, and even a ruptured ectopic pregnancy. Thus, it is critical that we rapidly exclude life-threatening causes of

Mizuho Spangler, DO, is Assistant Professor of Clinical Emergency Medicine, Keck School of Medicine, LAC+USC Medical Center Department of Emergency Medicine, Los Angeles, California, and Executive Editor, Audio CME Program, Urgent Care: Reviews and Perspectives (UC:RAP). Michael B. Weinstock, MD, is Associate Clinical Editor for JUCM; Adjunct Professor of Emergency Medicine, Department of Emergency Medicine, Ohio State University College of Medicine; Chairman and Director of Medical Education, Mount Carmel St. Ann's Hospital Department of Emergency Medicine, Columbus, Ohio, Immediate Health Associates, Inc.; and Editor-in-Chief, UC:RAP.



shoulder pain before proceeding with further diagnostic workups.

Having a methodical approach to the evaluation of

shoulder pain is vital because it not only creates structure and organization for the broad differential diagnostic possibilities but also enables health-care providers to quickly and efficiently ascertain the likely underlying problem. The practical stepwise method discussed here will allow you to quickly obtain a pertinent medical history and perform a focused physical examination. We then further narrow down the diagnostic possibilities by differentiating between traumatic and nontraumatic causes, infectious from inflammatory, acute from subacute, and so on, each step eliminating potential extrinsic causes of pain. Last, we explore the possible organic causes of pain arising from the glenohumeral joint itself or from the surrounding extra-glenohumeral structures. Although the anatomic accuracy in our diagnosis is not vital, what is important is the exclusion of life-threatening and limb-threatening causes of pain. Not only does this stepwise method improve diagnostic accuracy and limit risk to both the patient and the provider, but it also enables you to provide the best treatment modalities and final referral recommendations in your practice.

Consider the following clinical scenarios:

- Case 1: A 52-year-old construction worker presents with left shoulder pain that started while he was loading a heavy piece of equipment into his truck. He tried resting and icing his shoulder, but this did not provide relief; his pain is intermittent. He was brought to the urgent care center by his wife after he returned home and developed diaphoresis.
- Case 2: A 21-year-old woman with no significant past medical history presents with sudden onset of right shoulder pain that started abruptly this morning. She has no history of trauma. She states that she had some menstrual-like cramping in her abdomen the previous night, but she cannot recall the date of her last menstrual period. She is otherwise healthy.
- Case 3: A 75-year-old man with a history of chronic obstructive pulmonary disease presents with chronic left shoulder pain. Your findings on his musculoskeletal examination are unremarkable. There is no history of trauma. On further questioning, he reports having had an intermittent cough, unintentional weight loss, and night sweats for more than 1 year.
- Case 4: A 28-year-old right-handed tennis player with a history of shoulder injuries presents with gradual onset of weakness in his right shoulder. He reports having difficulty serving the ball during tennis games.

We will use these 4 cases as a framework for discussing the evaluation of shoulder pain.

Anatomy

The scapula, clavicle, proximal humerus, and its articulation in the glenoid fossa comprise the shoulder girdle. The shoulder girdle involves 4 joints:

- The sternoclavicular joint
- The acromioclavicular (AC) joint
- The scapulothoracic joint
- The glenohumeral joint

Both the sternoclavicular and AC joints are smaller fibrocartilaginous joints that provide anchoring to the axial skeleton. The glenohumeral joint is a ball-andsocket joint that is cushioned within the glenoid fossa by a capsule, and this articulation is what we commonly refer to as the shoulder joint.

The shoulder joint has the largest range of motion of any joint in the body, with impressive degrees of flexion, extension, abduction, adduction, circumduction, and rotation of the upper extremities. However, this mobility compromises its stability, making it vulnerable to injury.²⁻⁴

The glenohumeral joint is held together by a complex matrix of ligaments, tendons, muscles, and fascia. Most notable are the tendons of the rotator cuff muscles: the supraspinatus, infraspinatus, teres minor, and subscapularis, collectively referred to as the SITS muscles. The interworking muscles, ligaments, and tendons all function together as a kinetic chain, and thus dysfunction in one area can cause pathology in another.⁵

Musculoskeletal or Not?

When evaluating any patient presenting with shoulder pain, first determine whether the patient appears clinically stable or unstable. Even though musculoskeletal shoulder pain can cause significant pain and disability, consider whether the patient appears pale, diaphoretic, or presyncopal. Does their degree of pain correlate with the mechanism of injury, or does it seem out of proportion? It is important to avoid going down the pathway of diagnosis momentum, making sure instead to carefully consider potentially life-threatening etiologies of pain.

Clinical Red Flags to Consider

If your patient has any of these red flags, consider immediate transfer to an emergency department.

Acute nontraumatic pain: Sudden onset of pain

without a history of trauma is worrisome. Referred pain to the shoulder can occur because of myocardial infarction, diaphragmatic irritation from a ruptured ectopic pregnancy, splenic hematoma, subphrenic abscess, or other life-threatening concerns.^{2,3}

- Any neurovascular compromise: Beware of paresthesias or weakness in the extremities or any focal findings that might raise your suspicion that this is not simply musculoskeletal.
- Traumatic open wound: Patients may not be willing to disclose a wound sustained during an argument, assault, or arrest, and thus it is important to perform a thorough examination with the patient disrobed above the waist.
- Unstable vital signs: Hypotension and tachycardia are particularly worrisome.
- Abnormal electrocardiogram (ECG) findings
- Pregnancy: Positive findings on a pregnancy test should always give you pause and cause you to consider a ruptured ectopic pregnancy in the differential diagnosis, particularly if there is concomitant pelvic pain, vaginal bleeding, and no history of a confirmed intrauterine pregnancy on previous imaging.

History of Present Illness

After excluding imminently life-threatening causes of pain, we can then confidently proceed to obtaining a more focused medical history to further narrow down the differential diagnoses. Important questions to help you delineate intrinsic from extrinsic causes include the following:

- Is the pain acute or chronic?
 - Acute: what, where, why, and when did the patient notice the pain?
 - Chronic: How long? Any previous injuries? Overuse injuries? Occupational injury? Sports injury?
- Is the pain traumatic or nontraumatic?
- What are the quality and character of the pain?
 - Is it a dull pressure sensation that is regional and exertional, felt across the chest and shoulder? Get an ECG.
 - Is it sharp pain that feels like it is tearing from the scapula to the shoulder? Consider aortic dissection.
 - Are there any other areas of the body that are also painful at about the same time?
- Does pain occur at rest, or does it occur with movement? Which movement exacerbates the pain?
- Is the pain aggravated or alleviated by anything?

Are there any concerning associated symptoms such as fever, redness, warmth, abdominal pain, or back pain?

Past Medical History

It is also important to consider the patient's past medical history and surgical history.

- Social history: occupation, activities or sports (tennis, football, golf), use of musical instruments
- Smoking, alcohol abuse, illicit drug abuse
- Previous trauma
- Previous injuries or surgeries
- Medications taken
- Comorbidities (diabetes mellitus, myasthenia gravis, rheumatoid arthritis)
- Date of last menstrual period

Physical Examination

The physical examination is best performed using a stepwise methodical approach to avoid missing pitfalls. It is easy to be distracted by an impressive abrasion or laceration to the shoulder and miss a devastating underlying neurovascular injury if the examination procedure is not an established routine. The following is a careful, focused approach to the physical examination that can be performed at the bedside in minutes:

- **1. Inspection:** The shoulder should be evaluated first, with inspection from all directions—anteriorly, posteriorly, and laterally—to look for asymmetry or deformity along the shoulder girdle.³ Using the opposite shoulder as a comparison is always help-ful. It is important to note any skin changes (lacerations, abrasions, erythema, ecchymosis) and asymmetry due to soft-tissue swelling, hematomas, or obvious bony deformities. An "empty sulcus sign" is typically seen with shoulder dislocation.
- **2. Palpate:** Next, it is important to use your tactile skills to feel for focal tenderness, crepitus, warmth, or edema. Location of maximal pain may assist in diagnosis.
- **3. Range of motion:** It is important to evaluate patients using both active and passive range-of-motion testing to determine areas of limitation and to rule out dislocation. Noting limitations to the degree of motion in comparison with the unaffected side can help isolate the problem area.^{2,3} Active range-of-motion testing should ideally be performed with the patient in a seated position to eliminate contributions of other large muscle groups that could alter your examination findings.³ Severe pain

Table 1. Important Extrinsic Causes of Acute Shoulder Pain		
System	Diagnosis	
Cardiac	Acute coronary syndrome	
	Pulmonary embolism	
	Thoracic aortic dissection	
	Myocarditis	
	Cardiac tamponade	
Pulmonary	Pneumothorax	
	Pneumonia	
	Masses or tumor	
	Thoracic outlet syndrome	
	Pleural effusion	
Abdominal	Any intra-abdominal hemorrhage from liver or spleen lacerations, or ruptured ectopic pregnancy	
	Abdominal aortic aneurysm	
	Gallbladder, pancreas, or gastric disease	
	Renal colic	
	Splenic hematoma	
	Subphrenic abscess	
Neurologic	Cervical spine injury	
	Nerve impingement	
	Cerebrovascular accident	
	Transient ischemic attack	
Infectious	Herpes zoster	
	Cellulitis	
	Necrotizing fasciitis	

with micromotion or reluctance to move the joint at all is a clinical red flag for a septic joint.

4. Neurovascular: Performing a thorough sensorimotor examination is vital. Begin by evaluating the dermatomes along C5–T1 with light touch and pinprick sensory testing. Each of these dermatomes correlates to the associated nerve root of the brachial plexus and can help isolate damage. C5 and C6 can be tested along the lateral arm and forearm, respectively. C7 and C8 correlate to the tips of the middle and little fingers, respectively, and C8–T1 tests the medial forearm and arm. The trapezius, deltoid, biceps, thumb extensors, finger flexors, and interossei muscles should all be included in motor-strength testing, comparing suspected weakness with the strength of the contralateral side.^{2,3}

For proper vascular evaluation, assessment of the brachial, radial, and ulnar pulses is in order. If there is evidence of a weak pulse, expanding hematomas, pallor, or cool extremities, your suspicion for a serious vascular injury should be very high, warranting immediate transfer of the patient to an emergency department for further evaluation with computed tomography angiography and for vascular surgery consultation.

Stepwise Methodical Approach

After gaining significant information from the pertinent history and a thorough and focused physical examination, we can finally proceed to the following 4-step approach to determine the most likely cause of pain.⁵

Step 1: Traumatic Versus Nontraumatic History

When there is an acute traumatic history for the present condition, plain radiographs (x-rays) can eliminate both benign and worrisome traumatic diagnoses⁵:

- Clavicle fracture (medial,* middle, lateral)
- Proximal humerus fracture
- Glenohumeral joint dislocation (anterior most common; posterior*)
- AC joint separation
- Sternoclavicular joint separation*
- Scapular fracture* (usually due to high impact and associated with concomitant injuries)

Note: Diagnoses marked with an asterisk (*)

are considered serious injuries with a high likelihood of concomitant injuries because of the force required to cause fracture at these sites. They almost always warrant further workup and possibly subspecialty consultation. These patients should be stabilized, the joint should be immobilized, and the patient should be transferred immediately to an emergency department.

For glenohumeral concerns, a three-view shoulder series (including anteroposterior, lateral, and axillary views) is recommended. If the pain is localized to extraarticular areas, consider obtaining plain films of the clavicle, sternum, or the chest.

If the diagnosis is elusive after review of plain radiographic films, proceed to step 2.

Step 2: Intrinsic Versus Extrinsic Pain

Determining whether the shoulder pain is originating

SHOULDER PAIN IN THE URGENT CARE

intrinsically from the shoulder or instead from an extrinsic location is likely the most important step.⁵ The list of extrinsic causes can be extensive; however, important ones to consider are noted in **Table 1**.

Most extrinsic causes of shoulder pain can easily be eliminated by the medical history and physical examination findings. If these life-threatening or limb-threatening causes of extrinsic disease are ruled out and you believe the etiology of pain is intrinsic to the shoulder itself, then proceed to step 3.

Step 3: Extra-glenohumeral Versus Glenohumeral Cause

The extra-glenohumeral causes of shoulder pain are typically easier to diagnose or exclude, so we review them first.⁵

Extra-glenohumeral Causes

- Biceps tendinitis or tear: Pain is usually localized to the anterolateral shoulder and radiates down the ipsilateral arm. It is typically aggravated with any overhead activity, and at night.
 - Maneuvers:
 - Yergason test (where the elbow is flexed at 90° and the forearm is supinated against resistance)²
 - Speed test (with the shoulder flexed at 90° and the elbow in extension, the forearm is supinated against resistance)²
 - Treatment:
 - Rest
 - Ice
 - Nonsteroidal anti-inflammatory drugs (NSAIDs)
 - A sling for comfort
 - Referral to an orthopedic surgeon
- AC joint osteoarthritis: The AC joint itself is a complex matrix of capsular and extracapsular ligaments that help secure it to the surrounding muscular structures.^{2–4} This joint is vulnerable to osteoarthritis caused by aging and degeneration of the AC joint or by prior trauma.
- Scapulothoracic bursitis: Irritation and inflammation of the bursa underlying the scapula and overlying adjacent ribs. Patients complain of a painful popping sensation behind their shoulder blade that is made worse with any overhead movement.^{6,7} Pain can be elicited with palpation posterior to the scapula. Treatment is conservative: NSAIDs and referral to the patient's primary-care physician.

Glenohumeral Causes

Intrinsic glenohumeral causes of shoulder pain can be somewhat more difficult to differentiate and require a little more thought.⁵

- Glenohumeral septic arthritis: This usually results from hematogenous spread and manifests clinically with erythema, warmth, joint fullness (effusion), and severe pain with even the smallest micromotion. Transport for emergency arthrocentesis and intravenous antibiotics should be arranged.
- Glenohumeral osteoarthritis: Much like the AC joint, the gleno-

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14000 Commerce Parkway, Suite D Mount Laurel, New Jersey 08054 (877) 227-6374 www.natjan.com humeral joint is also predisposed to arthritic changes. Although glenohumeral arthritis predominantly occurs in elderly patients, it can occur in younger patients who have sustained repetitive injuries to the joint because of dislocations or direct trauma. A trial of NSAIDs, a sling for com"Seen most commonly in patients with diabetes and in middle-aged women, frozen shoulder is thought to be due to prolonged periods of shoulder immobilization and to lack of activity."

fort, and a referral for physical therapy and rehabilitation are recommended.

- Shoulder impingement syndrome: Patients can develop impingement syndromes for 2 reasons: (1) an increase in the volume of structures (muscle hypertrophy or inflammation) or (2) decreased available space within the joint due to osteophyte formation, fibrous tissue buildup, or anatomic derangements. Patients classically experience pain at night and often describe it as feeling like a toothache within the shoulder.⁴ Impingement can be clinically diagnosed with positive findings for the Neer sign (pain upon forcible flexion of the arm) or the impingement test (10 mL of 1% lidocaine is injected into the subacromial space, and the Neer maneuver is repeated).^{2–4} If there is relief of pain after injection, this suggests impingement. Treatment involves rest, NSAIDs, avoidance of overhead motion, and alternating shoulder exercises.
- Subacromial bursitis: This is inflammation of the bursa in response to irritation from the surrounding structures, commonly associated with impingement syndrome.³ On examination, abduction of the arm to 70° to 100° will elicit pain in the lateral shoulder. It may be difficult to distinguish subacromial bursitis from impingement syndrome; however, the treatment is the same: conservative with NSAIDs and referral.
- Rotator cuff tear and tendinopathy: These conditions are commonly seen in athletes with a history of repetitive overhead throwing (as in baseball or tennis) or in general populations of persons older than 40 years. Rotator cuff tendinopathy and tears lie along the same spectrum of disease. Patients with these conditions present with marked pain and inability to abduct the upper extremity.
 - **Drop arm test:** Findings are positive if the arm is passively abducted and the patient cannot actively hold it up against gravity.

- The supraspinatus test: The patient abducts the arm to 90°, and the examiner applies a downward force against the arm while having the patient attempt to resist the force and maintain position.
- Apley scratch test: The patient attempts to touch the superior and inferior aspects of the contralateral

scapula. Findings are positive if the patient is not able to do so. $^{2\mathchar`-4}$

Treatment in the urgent care center is the same for tears and tendinopathy and involves ice, NSAIDs, and referral to physical therapy for rehabilitation in 1 to 2 weeks.

- Adhesive capsulitis (frozen shoulder): This condition results from capsular thickening and contraction of the glenohumeral joint, limiting mobility. On examination, patients will demonstrate a very limited range of motion both passively and actively in all directions, particularly in abduction. Seen most commonly in patients with diabetes and in middle-aged women, frozen shoulder is thought to be due to prolonged periods of shoulder immobilization and to lack of activity.²⁻⁴ Treatment is aimed at alternating shoulder exercises with rest, use of NSAIDs, and referral to rehabilitation and orthopedics.
- Glenohumeral instability and dislocations: Shoulder instability is a relatively common problem and can present in varying degrees of severity, from mild subluxation all the way to a complete dislocation of the glenohumeral joint. Although glenohumeral instability most commonly occurs in athletes with overhead trauma, it can also occur in nonathletes with repetitive microtrauma. Anterior instability is the most common (95%) type of instability; however, dislocations of the glenohumeral joint can occur in 4 directions: anterior, posterior, inferior (luxatio erecta), and superior.^{2–4} All dislocations require an immediate neurovascular examination with particular attention to the axillary nerve innervation along the lateral aspect of the upper arm.
- Anterior dislocations: On examination, patients with anterior dislocations will have an abducted, externally rotated arm. They will be unable to cross their chest with the affected arm to touch their con-

tralateral shoulder. They may demonstrate positive findings on the apprehension test, which is the most sensitive special test for detecting shoulder instability. Placing the patient in a supine position, the examiner places anterior force on the humerus with external rotation. Apprehension (i.e., pain) with a sensation of subluxation is considered a positive finding.^{2,4}

Posterior instability: Patients with posterior instability present with a flexed, adducted, and internally rotated arm that they are unable to externally rotate.^{2–4} They may have positive findings for the sulcus sign: In a seated position, the examiner places downward traction on the arm, creating a sulcus between the humerus and acromion.

Select patients with acute anterior shoulder dislocations can potentially undergo closed reduction performed by urgent care clinicians trained and experienced with shoulder-reduction techniques that do not require anesthesia. However, other clinicians may prefer to defer to the emergency department for further case management. This decision is best left to the clinician's discretion and is based on clinician preference, the patient's comorbidities, the patient's ability to cooperate with reduction with minimal anesthesia, acuity of dislocation, and other practical concerns.

Clinical Correlations Advised Case 1

This case involved a 52-year-old construction worker who presented with left shoulder pain that started while he was loading a heavy piece of equipment into his truck. He tried resting and icing his shoulder but could not obtain relief for his intermittent pain. His wife took him to the urgent care center because she noted that his pain had significantly worsened and that he was diaphoretic and nauseated at home.

There are a number of red flags in this medical history, and your examination findings are relatively unremarkable. You apply the stepwise approach⁵:

- Step 1: traumatic or nontraumatic? The fact that this patient's pain began with exertion but without clear trauma is concerning. Although it is quite possible that he strained his rotator cuff, the fact that his pain comes and goes and is now worse with exertion is a red flag. Furthermore, the benign findings on his musculoskeletal examination do not directly correlate to any obvious intrinsic causes.
- Step 2: intrinsic or extrinsic? Given the red flags that the patient's history provides, you astutely

obtain an ECG before proceeding to step 3. The ECG demonstrates concerning evidence of acute myocardial infarction. Before proceeding with the rest of your urgent care workup, you determine that an acute coronary syndrome must first be ruled out, and you appropriately give him an aspirin while your staff arranges transport to an emergency department.

Case 2

This case involved a 21-year-old woman with no significant past medical history who presented with right shoulder pain that suddenly began 1 hour prior to her arrival at the urgent care center. She had no history of trauma. She stated that she had some menstrual-like cramping in her abdomen the preceding night, but she could not recall the date of her last menstrual period. She is otherwise healthy.

- Step 1: traumatic or nontraumatic? The patient has no history of trauma; however, you are concerned with her overall clinical appearance. She does not appear to be in an unstable condition, but she looks pale. While you wait for her vital signs and before you examine her, you ask your staff to perform a bedside test for urine level of human chorionic gonadotropin. Walking back from the bathroom, the patient has a syncopal episode. She is now hypotensive, and her pregnancy test is quickly done, with positive results.
- Step 2: intrinsic or extrinsic? Your clinical gestalt that the patient's appearance was a bit concerning was accurate, and she is now clinically unstable. You rush to examine her. Your findings on examination of her shoulder are unremarkable, yet her abdomen is tense, tender, and diffusely peritoneal. You are strongly suspicious that a ruptured ectopic pregnancy is causing intra-abdominal hemorrhage. The blood within the peritoneum has caused irritation along the diaphragm, causing referred pain to the shoulder. Given this possibly life-threatening extrinsic cause, you stop at this step and call 911. Given her hypotensive, unstable state, you also transfer her care to the accepting emergency department physician and make clear your concerns about hemorrhagic shock due to a ruptured ectopic pregnancy. The emergency physician consults the obstetrician before the patient arrives, and the patient is appropriately taken to an operating room minutes after arrival. Using the intrinsic-versus-extrinsic approach allowed you to recognize red flags first, which saves the patient's life.

Case 3

This case involved a 75-year-old man with a history of chronic obstructive pulmonary disease for more than 1 year who presented with chronic left shoulder pain. When you obtained further details of his medical history, you found that the patient has had an intermittent cough, unintentional weight loss, and night sweats for over 1 year. You move on to a focused physical examination, finding nothing remarkable on inspection, palpation, a check for range of motion, or neurovascular evaluation. He has no red flags in his history thus far, so it is appropriate to proceed with the following steps:

- Step 1: traumatic or nontraumatic? His pain is not caused by trauma.
- Step 2: intrinsic or extrinsic? At this point, you are still unsure. Components in his presentation that bother you include a chronic cough, weight loss, and night sweats. These components, together with unremarkable examination findings, prompt you to obtain a chest x-ray. While you wait for his radiographs, you proceed to step 3.
- Step 3: glenohumeral or extra-glenohumeral? Findings on his detailed shoulder examination are confirmed to be normal. You can exclude all glenohumeral causes. You examine the chest x-ray and note a large left apical mass. Given his otherwise normal examination findings, his pain is likely extrinsic, referred from the mass. After reassuring him and stressing the importance of close follow-up, you appropriately advise him to promptly see his primary-care physician the following morning, and the patient is subsequently referred to oncology.

This case illuminates an important point: Although the diagnosis of a new lung mass is not a typical urgent care diagnosis, nor is it expected in the urgent care setting, urgent care clinicians are often first-line health-care providers. Many patients use urgent care centers as sources of primary care. Thus when we recognize important clinical red flags (e.g., chronic cough, weight loss, and night sweats) because of our methodical approach to examination, we have the opportunity to be the providers who ultimately expedite diagnosis and care for these patients.

Case 4

This case involved a 28-year-old right-handed tennis player with a history of shoulder injuries who presented with gradual-onset weakness in his right shoulder. He reported having difficulty serving the ball during tennis games.

- Step 1: traumatic or nontraumatic? The patient cannot recall a recent acute traumatic injury. When you obtain further history, he reports playing tennis 5 days a week, which heightens your suspicion for overuse injury due to microtrauma. You continue your evaluation.
- Step 2: intrinsic or extrinsic? After reviewing a long list of potential extrinsic causes, you find that the patient has no evidence of infectious, cardiac, pulmonary, abdominal, or neurologic red flags that would explain his discomfort.
- Step 3: glenohumeral or extra-glenohumeral? A focused physical examination demonstrates marked pain within the right glenohumeral joint itself. You perform special tests to further elucidate limitations in range of motion of his affected arm. You find that he has difficulty abducting the upper extremity and cannot actively hold it up or against resistance, confirming a positive finding on the drop arm test. You now strongly suspect a rotator cuff tear, and in view of the patient's medical history and your findings on physical examination, this diagnosis seems likely. He has no apparent lifethreatening or limb-threatening issues. You administer an intramuscular injection of an NSAID, provide appropriate rest instructions, and treat him with a temporary sling. You advise him to see his primary-care physician for magnetic resonance imaging, and he subsequently is referred to an orthopedic surgeon for rotator cuff repair.

Conclusion

In all of these clinical cases, the patients benefited from the use of our stepwise approach to the evaluation of shoulder pain in the urgent care setting. First, potentially life-threatening causes of extrinsic shoulder pain must be quickly eliminated. This can be achieved at the bedside by obtaining a thorough medical history and performing a focused, structured physical examination. Any red flags encountered in the history or examination should trigger an expedited order for workups that will either support or disprove your suspicion, such as ECG to detect an acute coronary syndrome or a urine pregnancy test to rule out an ectopic pregnancy.

Without notable red flags for concerning extrinsic causes of shoulder pain, we can then proceed in a stepwise fashion to further narrow down the diagnostic possibilities. Differentiating traumatic from nontraumatic causes is the initial step. The next step is narrowing down these possibilities even further by deciphering whether the cause is intrinsic versus extrinsic and then, finally, glenohumeral versus extra-glenohumeral. Obtaining the exact anatomic diagnosis in the urgent care setting should not be our primary goal. What matters most is excluding life-threatening causes, and then appropriately addressing pain and giving exercise instructions or rest recommendations, and finally arranging for follow-up care and providing referrals.

Finally, remember that despite our prompt turnaround efforts, we are often the first or only providers of health care for patients. Because of poor access to health care, many patients rely on urgent care centers as their point of entry. We are not expected to be comprehensive in our workup, nor are we required to diagnose obscure and rare diseases. However, seizing the unique opportunity that urgent care offers to make a life-changing difference in our patients' lives is rewarding. Before you reflexively give a musculoskeletaloriented diagnosis and treatment plan to your next patient with shoulder pain, take a moment to stop and consider the stepwise methodical approach described here. Using it may make the difference between life and death.

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Practice Management

The Role of Urgent Care in an Integrated Care System: Insights from Intermountain Healthcare

Urgent message: This exclusive interview with Intermountain Medical Group Chief Executive Officer Linda Leckman, MD, illustrates how urgent care can improve access and clinical outcomes while reducing costs for patients in a system that integrates providers, hospitals, and health insurance using a shared electronic medical record and capitated payment.

ALAN A. AYERS, MBA, MAcc

Introduction

n the evolving U.S. health-care system, individual providers, ancillary facilities, hospitals, and payors are joining together in connected systems that are based on a shared medical record and fixed reimbursement per patient, focused on improving population health, coordinating care for chronic disease, and reducing overall health expenditures using risk models that are based on patient outcomes.

When the connected participants are legally unrelated entities, these structures are known as *accountable care organizations*. When there is common ownership such as with Kaiser Permanente in California and Geisinger Health System in Pennsylvania—they are known as *integrated health systems*.

In 2009, President Barack Obama singled out Inter-

Alan A. Ayers, MBA, MAcc, is Practice Management Editor for *JUCM*, is on the board of directors of the Urgent Care Association of America, and is Vice President of Concentra Urgent Care.



mountain Healthcare in Utah as an integrated provider, hospital, and health insurance organization that offers

"high-quality care at cost below average."¹ Spun off from the Church of Jesus Christ of Latter-day Saints in 1975, today Intermountain Healthcare operates 22 hospitals (45% of Utah's hospital beds) and 160 health-care facilities; it employs over 33,000 people, including 700

"Intermountain Healthcare is currently upgrading our EMR to a product that . . . will bring the EMR and practice management components together on the same system and will give us better efficiencies than we currently have."

of Utah's 4,600 physicians; and it provides health insurance under the SelectHealth brand to 19% of Utah's population.²

In this exclusive question-and-answer session with the *Journal of Urgent Care Medicine*, Intermountain Medical Group Chief Executive Officer Linda Leckman, MD, details the operating model, capabilities, and connectivity of urgent care and the benefits it brings to this integrated system.

Interview

Alan Ayers: Can you describe Intermountain's urgent care offering, including the number of facilities, positioning of facilities, hours, services offered, and target markets?

Linda Leckman: Intermountain InstaCare clinics are located throughout Intermountain Healthcare's service area in Utah. We have 30 clinics that are located primarily in our more populated communities—5 of those are stand-alone, and the remaining are part of larger outpatient facilities.

Hours for the majority of clinics are from 9 a.m. to 9 p.m. weekdays. Some clinics are open from 8 a.m. to 8 p.m., and a handful of our busiest clinics are open until 10 p.m. Weekend and holiday hours can vary by facility. We are currently piloting extended hours in one clinic in the Salt Lake City area that will stay open until midnight.

We promote the InstaCare as an ideal setting to receive care for

- Broken bones
- Colds and influenza
- Cuts and abrasions
- Earaches
- Headaches and migraines
- Infections
- Nausea
- Nosebleeds
- Sore throat
- Sprains or strains
- Stomachaches

InstaCare services are available to patients of any age or gender. In the Salt Lake and Ogden communities where we also offer Kids-Care, after-hours urgent care for children, we encourage pediatric patients to use those facilities.

Ayers: How does urgent care coordinate care with other Intermountain service lines, such as primary care, specialists, and occupational medicine, and with ancillary services, like imaging and physical therapy?

Leckman: When a patient presents at an InstaCare clinic, we identify their primary-care physician. If patients do not have a primary-care physician, we provide a list from which they can select one. When necessary, we will refer patients to a specialist.

If a patient visiting InstaCare has occupational medicine issues, we will provide an initial visit and then send the patient to WorkMed, our occupational medicine clinics, for follow-up care.

We offer x-rays in InstaCare clinics, but we can schedule any other needed imaging at one of our larger facilities. InstaCare clinics offer all of the basic laboratory services (e.g., central venous catheters, iStat hematology test system, urine tests, testing for strep throat), and we send out any specialty laboratory blood work.

Ayers: What electronic medical record (EMR) system does Intermountain use for urgent care, and how does it integrate with the rest of the health system?

Leckman: The InstaCare clinics currently use the same EMR system as the rest of our organization. We use our proprietary system, HELP2, for all charting, and GE Centricity Business for our practice management needs. Patient records are available to any Intermountain facility as soon as the information is entered into the system.

Intermountain Healthcare is currently upgrading our EMR to a product that we are co-developing with Cerner. The new system, called iCentra, will bring the EMR and practice management components together on the same system and will give us better efficiencies than we currently have. For example, physicians doing documentation will generate codes that will apply to the patient bill. The patient registration will transfer to the hospital, resulting in a smooth flow of patient data, and eliminate the need for double registrations. Ultimately, our goal is to make patients' experience at Intermountain as easy and seamless as possible.

Ayers: I've noticed a sensitivity to wait times, including posting wait times in the center and wait times at nearby centers, as well as a call-ahead service. How does Intermountain manage flow in its urgent care center to b "Of course one of the challenges with a walk-in service is to effectively manage the ebb and flow of wait times. A few years ago we implemented a computer program... to help us track patient wait times in our facilities."

at InstaCare is measured through clinical outcomes, cost, and patient experience.

tunities to improve. Success

Ayers: What role has patient-facing technology including your mobile application—played in differentiating and cultivating loyalty to InstaCare and KidsCare?

Leckman: We know that a significant target market for InstaCare services is the young, savvy, mobile consumer who looks for ways to connect via applications. In fact, mobile devices are increasingly the connection of choice for our patients. Nearly half of our digital connections are made through mobile devices. As a result, we have made "Mobile first" the mantra for our digital development and have created an application that is convenient and useful for consumers and patients. We feel a strong need to stay at the forefront of technology and connect with patients digitally because that is what they expect, and it helps us stay competitive in our market. The Intermountain Health Hub is one of the ways we are working to accomplish that goal.

Conclusion

Integrated health systems like Intermountain Healthcare are defined by their ownership of hospitals, physician practices, and health insurance; financial incentives that align medical cost savings, clinical outcomes, and population health; and coordination of primary and specialist care through an EMR. These are also the driving principles of the accountable care organizations authorized by the March 2010 health-care reform legislation. As Dr. Leckman illustrates, urgent care can play an important role in shifting low-acuity visits from emergency departments to a lower-cost outpatient setting, thus promoting the integrated system's goals of quality and efficiency. The key is to educate members about the benefits of using urgent care, to offer convenient locations and operating hours, to control wait times, and to engage members using mobile technology.

References

in its urgent care centers to limit patient waits?

Leckman: Of course one of the challenges with a walkin service is to effectively manage the ebb and flow of wait times. A few years ago we implemented a computer program, the "digital integrated grease board" (DIG), to help us track patient wait times in our facilities. We began posting those wait times in our clinics and, in the spring of 2014, launched a mobile application that lets patients use their smartphones to access a map of local InstaCare clinics with their respective wait times.

In conjunction with the release of the application, we also introduced a call-ahead program that lets patients call in to save a place in line for the InstaCare clinic. As a result, patients spend less time waiting in the clinic.

In addition, we encourage InstaCare clinics that are experiencing longer wait times to refer patients to other nearby InstaCare clinics that may have a shorter wait time.

Ayers: How does Intermountain market its urgent care services to SelectHealth members as well as to the community?

Leckman: SelectHealth provides printed and online materials to members that outline the difference in cost for services in different settings. The information shows the cost advantages of visiting an InstaCare clinic over using an emergency department for urgent care needs.

Ayers: What role does urgent care play in improving clinical outcomes and reducing costs for SelectHealth members? How do you measure success?

Leckman: Because InstaCare visits are much less expensive and less resource-intensive than a typical emergency department visit, members save money when they are able to utilize InstaCare facilities rather than a hospital for their urgent care needs. Clinical outcomes have always been a focus at Intermountain, and we are always looking at clinical outcomes in all settings and looking for oppor-

^{1.} Daley J. Obama singles out Intermountain Healthcare as model system. Salt Lake City, Utah: KSL Broadcasting; © 2015 [published 2009 September 10; accessed 19 March 2015]. Available from: http://www.ksl.com/?nid=148&sid=7873613

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Case Report

Pediatric Periorbital Cellulitis from an Intranasal Button Battery

Urgent message: When a child presents with periorbital cellulitis with no obvious cause, checking for intranasal foreign body, such as a button battery, is of paramount importance. Serious complications can be avoided if the foreign body is removed in a timely manner.

MAY MOHTY, MD, FAAP, FAAUCM, and JACOB ANDERSON, DO

Introduction

reseptal cellulitis, also known as periorbital cellulitis, is a relatively common diagnosis in the pediatric population. It is defined as infection of the space anterior to the orbital septum, a fibrous aponeurosis external to the globe, attaching at the periosteum and extending to the eyelids. When a patient presents with signs of facial and periorbital infection, an important initial step is to rule out the more serious condition of orbital cellulitis, which can confidently be done in the absence of diplopia, reduced visual acuity, abnormal light reflexes, proptosis, and ophthalmoplegia.¹ Further aiding in the differentiation of the two entities is the preceding course: preseptal infection is typically preceded by trauma or bacteremia, whereas orbital infection is often preceded by sinusitis.² This is illustrated in a retrospective study that included 262 children with preseptal or orbital cellulitis; trauma (including insect bites) was much more common in patients with preseptal cellulitis

May Mohty, MD, FAAP, FAAUCM, is a clinical assistant professor at the University of Arizona College of Medicine–Phoenix in Arizona and an urgent care physician at CIGNA Healthcare of Arizona. Jacob Anderson, DO, is a third-year resident and current chief resident at Banner–University Medical Center Phoenix Family Medicine Residency in Phoenix, Arizona.



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than in those with orbital cellulitis (40% vs. 11%).³

Case Presentation

A previously healthy 3-year-old Hispanic boy was brought in by his mother for treatment because he had Figure 1. Three-year-old child with periorbital and facial cellulitis.



facial swelling and redness of the left side of his face (**Figure 1**). The symptoms were first noted when he awakened in the morning on the day of presentation, and they had progressed, with swelling extending to the left eye, prompting the mother to seek care for him. Findings on a complete review of systems at presentation were negative; the mother reported no fever, cough, change in activity level or appetite, or preceding illness. She further reported no known history of trauma, insect bites, or prior cellulitis. She did note that approximately 4 days prior to presentation, the patient had experienced a bloody nose, but that this was common for him and that the epistaxis had resolved without treatment.

Observation and Findings

On presentation, the child's vital signs were as follows:

- Oral temperature: 98.6°F
- Blood pressure: 90/67 mm Hg
- Heart rate: 90 beats/min
- Respiratory rate: 20 breaths/min
- Weight: 14.9 kg

He was not in any distress, was breathing comfortably, and was afebrile. Physical examination findings

Table 1. Laboratory Test Findings		
Test	Results	
White blood cell count	19.8 × 10 ⁹ /L	
Hemoglobin/hematocrit	12.3/35.4	
Platelet count	343 × 10 ⁹ /L	
Segmented neutrophils	78.5%	
Lymphocyte count	16.6%	
Serum sodium	132 mEq/L	
Serum potassium	4.1 mEq/L	
Serum chloride	98 mEq/L	
Bicarbonate	25 mmol/L	
Blood urea nitrogen	8 mmol/L	
Creatinine	o.77 mg/dL	
Glucose	108 mg/dL	

were significant for dried blood at the left naris; externally, he had gross swelling of the left periorbital area, extending to the medial nose and left cheek, with associated mild erythema. His pupils were equal and reactive, and he had full extraocular range of motion bilaterally. No discharge, chemosis, or proptosis was noted. Examination findings, including oropharyngeal and otic, were otherwise unremarkable.

Diagnostic Studies

Basic laboratory analysis was performed, including a complete blood cell count with differential and basic metabolic panel, revealing a leukocytosis (**Table 1**). Because of the leukocytosis, significant amount of facial involvement, and the apparent rapid progression of his condition, he was given intravenous clindamycin and admitted to the general pediatrics floor of the hospital for further evaluation and management of suspected preseptal cellulitis.

When the boy was further examined by the inpatient team, no obvious external causes were found in support of the suspected diagnosis. The patient was noted to have dried blood at the left naris, but the entire nasal vault could not be visualized, so the nose was irrigated and suctioned for improved visualization. Reexamination revealed a metallic foreign body in the posterior vault. The object was controlled and removed with forceps and was identified as an LR44 alkaline battery cell (**Figure 2**).

The boy showed substantial improvement immediately after removal of the battery. The case was discussed with the on-call otolaryngology team, who recommended no further evaluation or formal consultation because the patient was doing well. The patient was discharged less than 24 hours after original presentation, after being prescribed a 10-day course of oral amoxicillin-clavulanate.

Diagnosis

Intranasal foreign body, button battery, complicated by periorbital cellulitis.

Discussion

Epidemiology

Intranasal foreign bodies are a frequent and often benign cause for presentation to urgent care, as well as in outpatient primary-care settings and emergency departments. Though there are a wide variety of potential household and environmental objects that pose a threat if inserted into the body, the vast majority do not cause significant clinical issues. However, 2 items have the potential for damaging effects: button batteries and magnets. Button batteries, found in many household tools, cause local destruction and alkaline tissue necrosis as a result of their electric charge. Magnets, if paired across tissues, can cause focal pressure and damage.

Clinical Presentation

In up to 88% of cases, patients present with a known foreign-body insertion into the nose without symptoms. In symptomatic patients, clinical findings can include mucopurulent nasal discharge, foul odor, epistaxis, nasal obstruction, and mouth breathing.⁴ Direct visualization of the foreign body is often readily accomplished without assistance; a nasal speculum or otoscope can be used if the foreign body is suspected to be further posterior or above the superior nasal turbinate.

A high index of suspicion for intranasal foreign bodies is appropriate when assessing toddlers with unexplained nosebleed and signs of soft-tissue infection. When direct visualization is impossible or insufficient, x-rays should be obtained, because unwitnessed foreign-body insertion is common in this age group and has potentially serious consequences. Button batteries and magnet batteries are corrosive to surrounding tissues and are of the great concern in this age group. Complications include nasal septum perforation, which leads to significant cosmetic deformity, and invasive infection of the central nervous system. Although many foreign bodies are not radiopaque, button and magnet batteries are, so x-rays are useful in ruling out these high-risk items.



A Waters view plain film, also known as an occipitomental view, is the radiograph of choice and involves an anteroinferior-to-posterosuperior view at an angle of 45° to the orbitomeatal line.

Specialty consultation is rarely needed, because the majority of foreign bodies can be removed by an experienced health-care provider. However, consultation should be sought in cases of penetrating foreign bodies, septal perforation due to corrosion, posterior foreign bodies that cannot be visualized for removal, or in cases of chronic foreign bodies, which are associated with significant inflammation.⁵

A further important complication to consider is the risk of cavernous sinus septic thrombosis in any presentation of cellulitis involving the so-called danger triangle of the face, or the medial one-third of the face.

Treatment

Treatment for intranasal foreign bodies consists of removal, which can be performed either through a positive-pressure technique in a cooperative patient with a smooth or soft foreign body, or through direct instrumentation. Positive pressure is accomplished by having the patient blow their nose while occluding the contralateral naris. Direct instrumentation is aided Recruit Urgent Care Professionals online at JUCM CareerCenter

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CASE REPORT

through the use of a topical anesthetic and topical vasoconstrictor. A solution of 1 part 4% plain lidocaine with 1 part oxymetazoline nasal spray is recommended.⁶ Often, objects can be removed with small forceps; with smooth objects (beads, pebbles) that are not easily grasped, unsuccessful removal attempts can push the object further back. If this occurs, a blunt right-angle hook, a balloon catheter, or a Katz Extractor oto-rhino foreign-body remover can be used. Both a balloon catheter and Katz Extractor work by passing the device beyond the foreign body and inflating the balloon deep to the foreign body, allowing for the removal of the foreign body.

For uncomplicated nasal foreign bodies, antibiotics are not routinely indicated. In cases of suspected infection or, as in this case, complicating periorbital cellulitis, antibiotics should be tailored to the apparent infection. For periorbital cellulitis, therapy is often empiric and based on likely organisms (*Staphylococcus, Streptococcus,* anaerobes). Recommended regimens include 7- to 10-day courses of amoxicillin-clavulanate plus, if methicillin-resistant *S. aureus* is suspected, trimethoprim-sulfamethoxazole or monotherapy with clindamycin.⁷

Conclusion

An urgent care physician should maintain a high index of suspicion for an intranasal foreign body when a child presents with periorbital cellulitis and unexplained nosebleed. If no foreign body is apparent on direct visualization, then occipitomental x-rays can detect batteries or magnets. Early detection and removal can prevent further serious complications.

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ABSTRACTS IN URGENT CARE

- Sudden Death When Older Patients Taking Spironolactone Are Given Trimethoprim-Sulfamethoxazole
- Steroids Do Not Necessarily Decrease Allergic Relapses
- Though Cephalosporin Allergies Are Not Common, They Do Occur
- β-Lactam Alone: Not Inferior to Drug Combinations for Community-Acquired Pneumonia
- Head Lice Treatment Guidelines Updated
- Prognostic Value of Troponin

SEAN M. MCNEELEY, MD

ach month the Urgent Care College of Physicians (UCCOP) provides a handful of abstracts from or related to urgent care practices or practitioners. Sean McNeeley, MD, leads this effort.

Sudden Death When Older Patients Taking Spironolactone Are Given Trimethoprim-Sulfamethoxazole

Key point: Another drug interaction with potential deadly consequences.

Citation: Antoniou T, Hollands S, Macdonald EM, et al; Canadian Drug Safety and Effectiveness Research Network. Trimethoprim-sulfamethoxazole and risk of sudden death among patients taking spironolactone. *CMAJ*. 2015;187:E138–143.

It is known that the combination of trimethoprim-sulfamethoxazole (TMP-SMX) and spironolactone may increase potassium levels in patients. This study is very similar to one reviewed previously concerning the risk of combining trimethoprimsulfamethoxazole and spironolactone in patients taking an angiotensin-converting enzyme inhibitor. In this Canadian casecontrol study, patients aged 66 years or older who were taking spironolactone and were then treated with an antibiotic were compared regarding risk of sudden death. A total of 328 sudden deaths were noted within 14 days of antibiotic use. Compared with amoxicillin, TMP-SMX was associated with a twofold risk in sudden death. Ciprofloxacin was also noted to present an increased risk of sudden death. From an urgent care perspective,



Sean M. McNeeley, MD, is an urgent care practitioner and Network Medical Director at University Hospitals of Cleveland, home of the first fellowship in urgent care medicine. Dr. McNeeley is a founding board member of UCCOP and vice chair of the Board of Certification of Urgent Care Medicine. He also sits on the *JUCM* editorial board. this study is a good reminder that it is important to exercise caution when choosing an antibiotic, especially for elderly patients taking spironolactone.

Steroids Do Not Necessarily Decrease Allergic Relapses

Key point: Once again, steroids are not the most important treatment for allergic reactions.

Citation: Grunau BE, Wiens MO, Rowe BH, et al. Emergency department corticosteroid use for allergy or anaphylaxis is not associated with decreased relapses. *Ann Emerg Med.* 2015 March 25. doi: 10.1016/j.annemergmed.2015.03.003. [Epub ahead of print.]

In this study of adult allergy-related reactions in 2 urban emergency departments, 2701 patients were divided into 2 groups: those with anaphylaxis (473 patients) versus those with allergic responses. Patients given steroids were compared with those not given steroids, regarding return for care and biphasic reactions. Rates for returns to an emergency department were 5.8% in patients who received steroids and 6.7% in those not receiving steroids. There were 4 biphasic reactions in the steroid group and 1 in the nonsteroid group. On the basis of statistical analysis, the authors concluded that corticosteroid use was not associated with a decrease in relapses necessitating additional care within 7 days. For the urgent care provider, these findings are probably too early to warrant any change in prescribing steroids, but they are a definite reminder that epinephrine is the drug to consider giving first. Hopefully future larger randomized studies will help clarify the benefits of steroids for allergic reactions.

Though Cephalosporin Allergies Are Not Common, They Do Occur

Key point: Cephalosporin allergies are uncommon. Citation: Macy E, Contreras R. Adverse reactions associated with oral and parenteral use of cephalosporins: a retrospective population-based analysis. *J Allergy Clin Immunol.* 2015;135:745-752.

Allergic reactions are a common concern with antibiotics. The authors of this 3-year retrospective study reviewed adverse reactions, including allergies, to cephalosporins. More than 600,000 patients were exposed to more than 900,000 patients of oral cephalosporin antibiotics, and more than 300,000 patients were exposed to 480,000 courses of antibiotics. Allergic reactions were noted in only 0.56% of women and 0.43% of men. Anaphylaxis occurred in 5 oral and 8 parental exposures. The most common serious adverse effect was infection with *Clostridium difficile* within 90 days in 0.91% of study participants. For the urgent care provider, these findings emphasize the relative safety of cephalosporins but also are a reminder that there is no medication without adverse effects.

β-Lactam Alone: Not Inferior to Drug Combinations for Community-Acquired Pneumonia

Key point: Considerations of antibiotics for adults with community-acquired pneumonia.

Citation: Postma DF, van Werkhoven CH, van Elden LJ, et al; CAP-START Study Group. Antibiotic treatment strategies for community-acquired pneumonia in adults. *N Engl J Med*. 2015;372:1312–1323.

The evidence for the best antibiotics to treat communityacquired pneumonia is not definitive. This study compared treatment with a β -lactam alone versus a β -lactam plus a macrolide versus a fluoroquinolone alone. The design looked at the noninferiority of β -lactam alone. Patients were hospitalized in locations other than intensive care units. A total of 2283 patients were enrolled in the study, with all-cause mortality as the main end point and with time to oral medication, length of hospital stay, and complications also reviewed. Overall, β -lactam alone was found to not be inferior. For the urgent care provider, this probably does not directly translate to treatment of the average patient, but when allergy or drug interactions prevent therapy with a macrolide or fluoroquinolone, the findings of this study might help reduce concern about prescribing β -lactam alone.

Head Lice Treatment Guidelines Updated

Key point: Head lice treatment has advanced, as has advice on when to send a child with head lice back to school. Citation: Devore CD, Schutze GE; Council on School Health "No healthy child should be excluded from school after treatment for head lice. 'No nits' policies are not helpful."

and Committee on Infectious Diseases. Head lice. *Pediatrics*. 2015;135:e1355–1365.

Although most abstracts reviewed in this section are based on new research, this particular article is a great review that should be read in its entirety by all urgent care providers. Here are several highlights from the article:

- Transmission of head lice is difficult and usually takes direct contact with a severely afflicted patient.
- No healthy child should be excluded from school after treatment for head lice. "No nits" policies are not helpful.
- Most children should first be treated with over-thecounter medicines for head lice, because they are the least toxic remedies.
- Consider manual removal of lice if other methods are not acceptable for some reason (patient's age, toxicity).
- Screening programs for head lice have not been proven to significantly affect the incidence of head lice over time.

Prognostic Value of Troponin

Key point: Another potential role for troponin.

Citation: Hakemi EU, Alyousef T, Dang G, et al. The prognostic value of undetectable highly sensitive cardiac troponin I in patients with acute pulmonary embolism. *Chest*. 2015;147: 685–694.

Most of us understand the role of troponin in cardiac diagnosis and treatment. In this retrospective cohort study, however, the authors investigated whether troponin can be used to riskstratify patients with pulmonary embolism. Patients with the diagnosis were divided into 2 groups according to whether their troponin level was more or less than 0.012 ng/mL. End points included in-hospital death, thrombolytic therapy, and cardiopulmonary resuscitation. Patients were monitored during a 5-day hospital course. Those in the group with lower troponin levels experienced none of the end points and had fewer complications. Of note, the group with higher troponin levels had a slightly worse medical condition overall. For the acute-care provider, this study's findings are early, but they do define a group of patients with pulmonary embolism who should probably be admitted to a hospital: those with a troponin level >0.012 ng/mL. The findings also provide another reason to consider having troponin available. 🔳



CLINICAL CHALLENGE: CASE 1

This feature will challenge your diagnostic acumen with a glimpse of x-rays, electrocardiograms, and photographs of conditions that real urgent care patients have presented with.

If you would like to submit a case for consideration, please e-mail the relevant materials and presenting information to *editor@jucm.com*.



INSIGHTS IN IMAGES: CLINICAL CHALLENGE

THE RESOLUTION

Figure 2.

Diagnosis: Osteochondromatosis. Osteochondromatosis is an inherited disorder in which multiple osteochondromas (*black arrows* in **Figure 2**) are seen throughout the skeleton.

Patients may have anywhere from 2 osteochondromas to hundreds of them. Most are incidentally found on x-rays in adolescents. If osteochondromas are not discovered incidentally, patients present in the first or second decade of life with palpable bony masses and limb shortening.

Complications of osteochondromas include fractures, bony deformities, neurologic and vascular injuries, bursa formation, and malignant transformation.



A child presents after a fall on an outstretched arm from monkey bars. Pain and voluntary guarding of the elbow are noted.

View the image taken (**Figure 1**) and consider what your diagnosis would be.

Resolution of the case is described on the next page.

INSIGHTS IN IMAGES: CLINICAL CHALLENGE

THE RESOLUTION



Diagnosis: Occult elbow fracture.

Note the posterior fat pad that is evident on this lateral view (**Figure 2**). Posterior fat pads are never normal and usually represent an occult elbow fracture when no other radiographic findings are seen. Note the sail sign (arrows), which identifies the anterior fat pad. This may be normal when present without other radiographic abnormalities. (**Figure 1** modified with permission and **Figure 2** used unmodified with permission under a Creative Commons BY 3.0 U.S. license from James Heilman, MD. Fat pad sign. In: *Wikipedia*. http://en.wikipedia.org/wiki/Fat_pad_sign. Original figure available from http://commons.m.wikimedia.org/wiki/File:Sailsign.PNG.)



HEALTH LAW

Two-Thirds

JOHN SHUFELDT, MD, JD, MBA, FACEP

Editor's note: For almost 10 years, Dr. John Shufeldt has generously shared his talents as a writer, legal expert, and thought leader with JUCM readers as the contributing editor of our Health Law department. Although John is retiring as its regular contributor, he will always remain its award-winning founder. In future issues, the Health Law column will be expanded to include new contributors and cover a broader scope of subjects, including compliance and regulatory topics.

just returned from my 20th Urgent Care Association of America (UCAOA) convention and am feeling a bit nostalgic. As I began to reminisce about the early days of urgent care medicine, it hit me like a sledgehammer that my life is flying by rather quickly.

According to Death-Clock.org, more than two-thirds of my life is over. More importantly, at least one-third of that time has been spent in urgent care medicine. When I realized this, two thoughts crashed into my consciousness:

- What the heck am I doing with my life, hanging around all of you?
- This has been a helluva ride with amazingly creative and hardworking professionals.

So like every other semiconscious person lying on their deathbed, I began to reflect on the last 22 years I have spent in urgent care medicine.

I can specifically remember the first day our urgent care center opened. It was on October 13, 1993, and it was raining. Our only patient was a wet, mangy dog who wandered in out of the rain. She did not even have the co-pay! At that time, NextCare was called Arizona Family and Urgent Care. It was changed to NextCare only after I heard the front-office person answer the phone with our acronym.

In the early days, Bill and Greg started and ran the North American Association for Ambulatory Urgent Care, and Franz



John Shufeldt is CEO of Urgent Care Integrated Network and sits on the Editorial Board of the *Journal* of Urgent Care Medicine. He may be contacted at Jshufeldt@Shufeldtconsulting.com. "Today, thanks to their perseverance, UCAOA is the preeminent urgent care organization. Over the years we have prospered under the leadership of a number of board chairs, members, and staff members."

started and led the American Academy of Urgent Care Medicine. In 2004 Joe, Tom, and I spent countless hours on the phone with Lee, Franz, and Bill trying to figure out how to merge all of the organizations.

After the failed reconciliation and merger, UCAOA was formed as a not-for-profit corporation on November 12, 2004 by Bill, Don, Lee, Marge, Dan, John K., and David. Becky was the first employee, and she coordinated the very first UCAOA conference in Orlando, Florida. Lou Ellen was hired as the executive director after the second conference in Lake Tahoe.

Today, thanks to their perseverance, UCAOA is the preeminent urgent care organization. Over the years we have prospered under the leadership of a number of board chairs, members, and staff members. Jeff, Alan, another John K., Tim, Nate, Don, Peter, Robert K., Rob, Roger, Laurel, Ken, and Joanne—to name a few—spent countless unpaid hours doing their best to further our profession. Without them, UCAOA would not exist in its present form.

Urgent care was started long before I opened a center in 1993. Most early urgent care operators and centers, save for Bruce and American Family Care (AFC), opened and then closed their doors in the 1980s, after which there was a vacuum of about 5 years until centers again started to appear.

Because of the expansive thinking of Scott, Peter, and Tony, urgent care entered the world of franchising in a big way in 2005. Together, they grew Doctors Express to more than 60 sites before selling to Ensign in 2011. Today, Doctors Express is owned by Bruce and managed by the team at AFC and the franchising board.

The first issue of the *Journal of Urgent Care Medicine* was published in October 2006, debuting Lee as editor-in-chief.

HEALTH LAW

"What does this mean for urgent care? It means we have to continue to adapt, grow, and persevere. In doing so, we need to learn how to play as one organism as opposed to as individuals. We have to lobby together, contract together, and fight together for our patients and our profession. Most importantly, we have to innovate."

Thanks to Stuart, Peter, and Lee, the journal has remained the voice of our industry. To date, the journal's editorial team and my mother have suffered through almost 100 of my articles and columns. As I reread them and reflect back over the years, I can I honestly say that unlike red wine, my writing has not improved with age! As the oenophiles out there know, you have to change your selection every once in a while, so it is time to change wines and *Health Law* columnists.

The Urgent Care Fellowship was also started in 2006, at University Hospitals Case Medical Center in Cleveland, Ohio, supported by a grant from UCAOA.

The growth of urgent care and the increasing sophistication of center operators have fostered a number of organizations that many of us now depend upon for our day-to-day functions. Thanks to David and Eric, urgent care medicine has industryspecific electronic health records and revenue-cycle-management companies that focus solely on our industry.

I know that those of you with gray hair will agree that the conferences, the vendors, and the speakers—thanks to Carla, Jami, and their teams—have gone from really good to exceptional. During Becky's tenure, the vendors enjoyed a level of hand-holding and engagement reminiscent of that provided by a Montessori schoolteacher. More importantly, the speakers and the lectures have hit a whole new level of professionalism and information dissemination, thanks to the UCAOA's Education Committee.

Lee also continues to further our discipline. He co-edits the *Textbook of Urgent Care Medicine* and has developed the industry's first—and to my knowledge only—online curriculum for urgent care medicine and urgent care nursing and medical assisting, called Core Content.

Michael is adding his own version of virtual education with UC:RAP, Urgent Care: Reviews and Perspectives, which is a series of podcasts on urgent care that is a spin-off of the very popular series EM:RAP, Emergency Medicine: Reviews and Perspectives.

Now that I have reminded you of our history, I will close with the clarity that comes only on one's deathbed. We owners and operators of urgent care centers are disrupters and survivors. We invented our own industry, and in doing so, we helped alleviate overcrowding in emergency departments (EDs) and primary-care offices.

Our industry has treated hundreds of millions of patients, saved billions of dollars, and saved thousands upon thousands of lives. Despite our success, though, I believe we are about to enter the fight of our lives. Our early value proposition was twofold: The urgent care industry exists to (1) alleviate ED overcrowding and inefficiency and (2) to lower the cost of ondemand care.

Today, most EDs have gone through process redesign and are posting their wait times (somehow always about 6 minutes) on billboards in their catchment areas. Also, freestanding EDs are popping up all over the place to treat walk-in patients with higher-acuity conditions. Both hospital-based and freestanding EDs pull patients with moderate-acuity conditions out of our treatment rooms. Virtual care and retail clinics continue to chip away at patients with lower-acuity conditions by offering a lower price point and, in some cases, 24/7 on-demand service.

Even more concerning are the proliferation of narrow networks and accountable care organizations demanding that their primary-care providers have more open slots and extended office hours. Recently, I was consulting near Boston, and the primary-care providers would come in on Saturdays and Sundays to see their patients. I even know of a few managed care organizations that have moved to prior authorization for urgent care patients.

What does this mean for urgent care? It means we have to continue to adapt, grow, and persevere. In doing so, we need to learn how to play as one organism as opposed to as individuals. We have to lobby together, contract together, and fight together for our patients and our profession. Most importantly, we have to innovate. If you were fortunate enough to hear Jonathan Bush's keynote address at the close of the UCAOA meeting, you saw that our future clearly hinges on our ability to function *within* and not *outside of* the health-care continuum.

To accomplish this, we must have systems that share and disseminate protected patient information along the continuum of care while avoiding data security breaches. In short, we have to move our once disparate and fractionalized urgent care industry into the big leagues of interaccessability and interoperability.

As Benjamin Franklin said, "We must all hang together, or assuredly we shall all hang separately." Now is the time to innovate, collaborate, and hang together.

For those of you who know me, this will come as no surprise: I remain the eternal optimist and very bullish. My faith in this truism comes from my long history in our space and from what I know about the tenacity and creativity of my urgent care sisters and brothers. Thus, my glass remains two-thirds full. I will see you all further on up the road. You have my eternal thanks for reading my articles!



CODING Q&A

Intravenous Therapy

DAVID STERN, MD, CPC

We perform a lot of intravenous (IV) infusions in our urgent care facility. Sometimes we also perform IV pushes and hydration at the same time as the infusion. What is the correct way to code multiple IV infusions? Do we have to document start and stop times for each IV service?

A If an IV infusion and IV push are performed concurrently in the same IV site, you should only bill one "initial" code. According to *Current Procedural Terminology* (CPT) guide-lines, only one initial service code should be reported for a given date, unless protocol requires that two separate IV sites must be used. When the procedures for these codes are performed in the physician's office, the initial code billed is the code that best describes the primary reason for the IV fluids and should always be reported irrespective of the order in which the infusions or injections occur.

Certain procedures and supplies are included and are not reported separately if used to facilitate the infusion or injection:

- Use of local anesthesia
- IV start
- Access to indwelling IV, subcutaneous catheter, or port
- Flush at conclusion of infusion
- Standard tubing, syringes, and supplies

For example, a patient has dehydration (ICD-9-CM¹ 276.51 or ICD-10-CM² E86.0), and the health-care provider orders an infusion of 1000 mL of normal saline. On the basis of the documentation, the key reason for the visit is dehydration. The hydration infusion is started at 3:00 p.m. The patient becomes nauseated 10 minutes later, and the provider orders 25 mg of Phenergan (promethazine) to be pushed via the same access site, and that procedure is performed at 3:13 p.m. The infusion

International Classification of Diseases, Ninth Revision, Clinical Modification.
 International Classification of Diseases, 10th Revision, Clinical Modification.



David E. Stern, MD, CPC, is a certified professional coder and board certified in Internal Medicine. He was a director on the founding Board of UCAOA and has received the organization's Lifetime Membership Award. He is CEO of Practice Velocity, LLC (www.practicevelocity.com), PV Billing, and NMN Consulting, providers of software, billing, and urgent care consulting services. Dr. Stern welcomes your questions about urgent care in general and about coding issues in particular. "According to Current Procedural Terminology (CPT) guidelines, only one initial service code should be reported for a given date, unless protocol requires that two separate IV sites must be used."

is completed at 4:00 p.m., and the IV line is disconnected. The proper codes for the procedure are as follows:

- 96360: "Intravenous infusion, hydration; initial, 31 minutes to 1 hour"
- J7030: "Infusion, normal saline solution, 1000 cc"
- 96375: "Each additional sequential intravenous push of a new substance/drug"
- J2550: "Injection, promethazine HCl, up to 50 mg"

However, say that the same patient from our example returns to the clinic later the same evening, still nauseated. The diagnosis then is nausea (ICD-9-CM 787.02 or ICD-10-CM R11.0), and the provider orders an IV push of 25 mg of Phenergan. The IV is started, the Phenergan is administered from 7:05 to 7:10 p.m., and then the IV line is disconnected. In this case, you would bill CPT code 96374, "Intravenous push, single or initial substance/drug," with modifier -59, because the incident is separate from the first visit and another IV placement had to be performed. You will want to make sure that your documentation for both visits is very clear in case of an audit.

In another example, a patient has come in for a therapeutic infusion of "antibiotic A," which is started at 1:00 p.m. Via the same access site, a bag of 1000 mL of normal saline is hung at 1:02 p.m. to facilitate the infusion. The provider then orders a push of 60 mg of Toradol (ketorolac tromethamine) to help with the discomfort. The push is performed from 1:10 to 1:13 p.m., again via the same access site. At 1:22 p.m., "antibiotic B" is administered as a push at the direction of the provider, using the same access site, and this is completed at 1:25 p.m. The IV line is disconnected at 2:00 p.m.

To code, you need to first establish the primary reason for the encounter. In this case, that would be the infusion of the

Call for Articles

JUCM, the Official Publication of the Urgent Care Association of America, is looking for a few good authors.

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> Please e-mail your idea to JUCM Editor-in-Chief Lee Resnick, MD at editor@jucm.com.

He will be happy to discuss it with you.



CODING Q&A

antibiotic, so your initial code is 96365. You would bill codes as follows:

- 96365: "Intravenous infusion, for therapy, prophylaxis, or diagnosis (specify substance or drug); initial, up to 1 hour"
- J7030: "Infusion, normal saline solution, 1000 cc"
- 96375 X 2: "Each additional sequential intravenous push of a new substance/drug (list separately in addition to code for primary procedure)"
- J1885 X 4: "Injection, ketorolac tromethamine, per 15 mg" (4 U)
- The Healthcare Common Procedure Coding System (HCPCS) codes for both of the antibiotics administered³

Time is a factor in hydration and infusion codes. There is no specific direction on how the time must be documented; however, a chart auditor will generally expect to see start and stop times for each individual procedure clearly documented in the medical record.

When is it appropriate to bill for normal saline with a hydration procedure?

A If the urgent care center purchased the saline, you can bill for it in addition to the administration codes. For example, when performing hydration—CPT code 96360, "Intravenous infusion, hydration; initial, 31 minutes to one hour" and add-on code 96361, "... each additional hour"—you would bill for the saline separately.

You may also bill separately for normal saline used to help facilitate drug infusion if the normal saline was purchased by the center. For example, a patient was given 1 g of Rocephin (ceftriaxone) with a 250-mL bag of normal saline intravenously over a period of 30 minutes. You would bill using the following codes:

- 96365: "Intravenous infusion, for therapy, prophylaxis, or diagnosis (specify substance or drug); initial, up to one hour"
- J7050: "Infusion, normal saline solution, 250 cc"
- Jo696 X 4: "Injection, ceftriaxone sodium, per 250 mg"

However, if you are infusing a drug for which normal saline is already packaged in, you would not code separately for the saline. Some payors may bundle the normal saline with the procedure, so you will want to check individual payor policies and contracts.

3. See http://www.cms.gov/Medicare/Coding/HCPCSReleaseCodeSets/ Alpha-Numeric-HCPCS.html.

Note: CPT codes, descriptions, and other data only are © 2011, American Medical Association. All Rights Reserved (or such other date of publication of CPT). CPT is a trademark of the American Medical Association (AMA).

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DEVELOPING DATA

ata from the 2014 Urgent Care Chart Survey of 1,778,075 blinded patient visits to more than 800 different urgent care clinics, conducted by the *Journal of Urgent Care Medicine*, show that the top types of diagnosis codes for visits included respiratory (52.9%), wound/trauma/fracture (34.9%), ear (9.2%), dermatologic (7.5%), and genitourinary (7.0%).

The survey's methodology and data abstraction forms were initially designed in 2008 by researcher Robin M. Weinick, PhD, then an assistant professor at Harvard Medical School and a senior scientist at the Institute for Health Policy at Massachusetts General Hospital, and now associate director of RAND Health.



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