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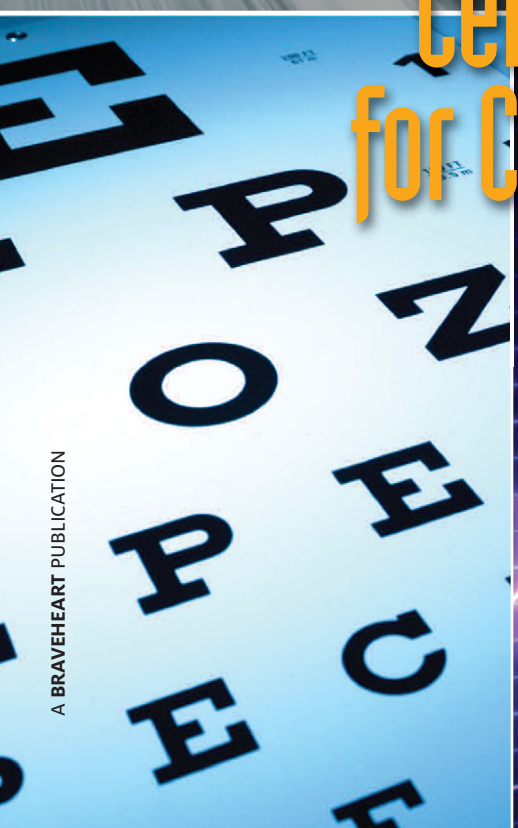
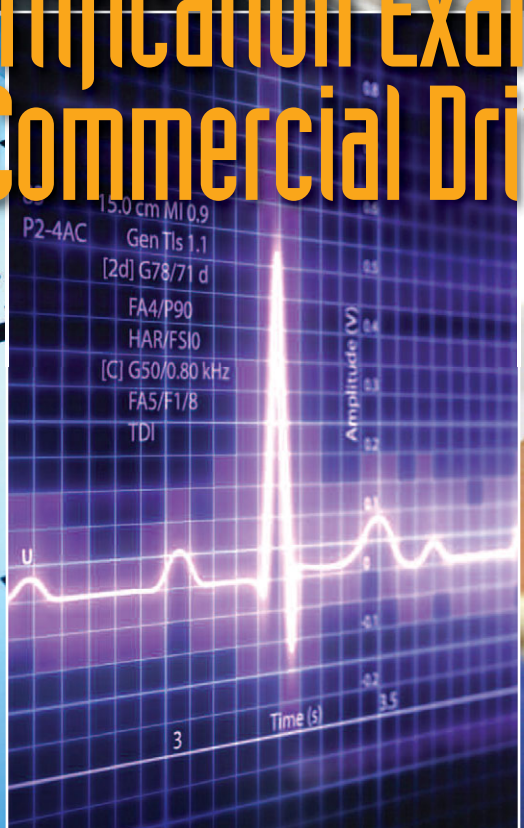
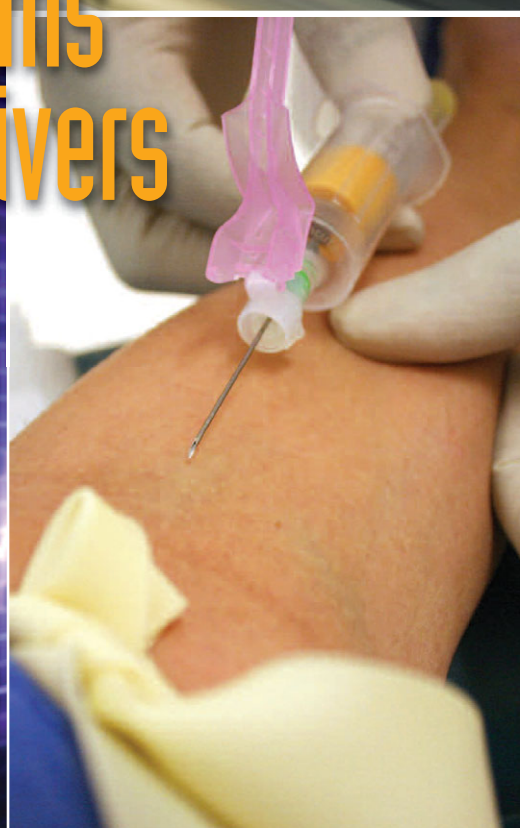
IN THIS ISSUE

Providing DOT Medical Certification Exams for Commercial Drivers







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LETTER FROM THE EDITOR-IN-CHIEF

Physician Recruiting: Standing Out in a Crowd

Urgent care is growing by hundreds of centers each year, and available physicians are declining with equal speed. Urgent care training is variable, at best, and urgent care experience is hard to find. Expanding health systems with their in-house recruiters and high visibility are tightening the squeeze.

All told, it's a recipe for unfilled positions and staff burnout.

Whether you are looking to expand locations, add providers, or replace departing ones, you are bound to be faced with the formidable task of recruiting.

Successful recruiting can be a real difference-maker for a practice. It supports practice growth, improves staff morale, and allows leaders to focus their attention on other areas of practice improvement. Failure can lead to lost revenue, missed opportunities and high turnover. Successful recruiting requires an appreciation and application of a few key principles that start with identifying and interviewing viable candidates.

Identify

Reaching candidates can be challenging. Physicians are flooded with direct mail, and vying for their attention requires persistence and volume. You cannot afford otherwise. Remember, they don't even know you exist, so before you can sell them on the virtues of your practice, you must reach them.

- Post on job boards (such as those hosted by UCAOA at *http://jobs.ucaoa.org/post.cfm*, and by PracticeLink at *www.practicelink.com*, etc).
- Include a jobs link on your site.
- Advertise in journals. Remember, persistence pays.
- Direct mail still works. You can target by specialty and region. Lists are available through associations (UCAOA, AAFP, AMA) and through one of many list rental firms.
- Try social networking; young physicians use this readily.
- Mentor residents. This gives you an opportunity to recruit and train at the same time.
- Network with your colleagues. Many of them are looking to transition their careers.
- Work with recruiters, but bear in mind that this is a mixed bag. They can certainly bring a number of candidates to the table, but they are not always the best candidates. They are expensive ($20,000 per placement, on average). Additionally, while they do relieve the burden of identifying candidates, they should not be relied on too much to sell the opportunity.

Interview

This is your opportunity to seal the deal and align expectations.

- Once you have identified some candidates, respond to their inquiries immediately! If you wait much more than one or two days to respond, your chances of closing the deal on a good candidate drop considerably.
- Unless you are an extremely large network, phone calls should be handled by a lead physician with a vested interest in the practice. Be prepared when you call. You should be able to spend 30 to 45 minutes describing the opportunity.
- Ask lots of open-ended questions to get a feel for what the candidate is looking for, what interests them. Try and understand what the candidate's expectations are. This will save everyone valuable time if it is determined that expectations are not aligned.
- Finish the interview by addressing how your opportunity can meet the professional and practice goals identified in the call. If you like the candidate, discuss an on-site visit on the first call. Plan their visit around interests (personal and professional) identified in the phone interview.

Don't forget to have fun! If you don't enjoy recruiting, have someone else do it. Your goal is to make the candidate feel wanted. They need to feel like they belong with your group.

And finally, make recruiting a priority. You need the best candidates who are the best fit for your practice. A "mis-hire" is worse than a "missed hire." ■

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

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September 2010

VOLUME 4, NUMBER 11

CLINICAL

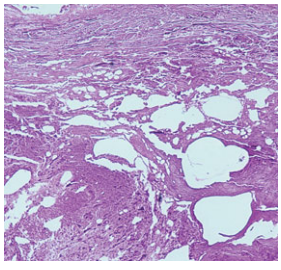
13 Providing DOT Medical Certification Exams for Commercial Drivers

For every interstate 18-wheeler or bus you pass (or get stuck behind), there's a driver who had to pass a Department of Transportation certification exam. Could your practice be bolstered by your becoming accredited to conduct such exams?

By Ellison H. Wittels, MD, FACP

CASE REPORT

21 Promethazine-induced Tissue Necrosis: A Case Presentation



Promethazine is likely to be the right choice for many situations that arise in your urgent care center. As with all medications, however, there are potential hazards. Your ability to anticipate and manage any potentially serious side effects is crucial to positive outcomes.

By Shailendra Saxena, MD, PhD, Naureen Rafiq, MD, Liji George, MD, Cara Olsen, PharmD, and Mikayla Spangler, PharmD

IN THE NEXT ISSUE OF *JUCM*

Poisonings rank right behind motor vehicle accidents among leading causes of death in the U.S., with unintentional ingestion being the most common precipitating event. Whether the substance is a hypnotic, an opioid, a street drug, or even a cardiovascular or over-the-counter product, preparation is key to immediate, lifesaving action.

WEB EXCLUSIVE

Investing in Expansion: Do It Yourself, or Take on Investors?

It took a certain level of risk tolerance and financial acumen to open and succeed with your first urgent care center. Before you take the next step by expanding your business, there are a few other things you need to consider. Available only at www.jucm.com.

By Michael Gotlieb

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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, *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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LETTERS TO THE EDITOR

Regarding Our June and July/August Issues

Asthma in the Pediatric Population

To the Editor:

The review of pediatric asthma treatment (Asthma in the Pediatric Population: An Urgent Care Approach, by Muhammad Waseem, MD, Nicholas Caputo, MD, Geeta Krishna, MD, Joel Gernsheimer, MD, *JUCM* June 2010) was excellent. I would add that patients with severe exacerbations who fail to respond adequately to a unit dose bronchodilator should receive repeated back-to-back or continuous nebulized albuterol, regardless of tachycardia or shakiness, and be considered for transfer to the ED.

In addition, I was wondering about one other related issue.

In several recent lectures, I have heard about the use of IM or SQ epinephrine (1:1,000, in doses similar to treating severe allergic reactions) in younger patients with very severe asthma exacerbations, and have found it to be useful in several similar situations myself. I realize, however, that this is an uncontrolled "study."

Could the authors comment on any evidence or their experience with epi, which seems like it could readily useable in the urgent care center for the worsening patient, all other available treatments being rendered, while awaiting ambulance arrival?

Joseph Toscano, MD
San Ramon (CA) Regional Medical Center
Urgent Care Center, Palo Alto (CA) Medical Foundation
(Dr. Toscano is also a member of the JUCM *Editorial Board.)*

The authors respond: We appreciate Dr. Toscano's kind words about our article and for his important comments and questions. We agree that patients who are still tight despite initial treatments with nebulized albuterol should continue to receive repeated doses of nebulized albuterol, or even continuous nebulized albuterol.[1] Also, it has been our experience, as well as the experience of others, that severe asthmatics are often tachycardic because they are still in distress; treating them with nebulized albuterol will often decrease the heart rate as the patient begins to breathe better.[2] It should also be noted that adding nebulized ipratropium to the nebulized albuterol often helps severe asthmatics in the ED.[3]

We also agree that asthmatics who are still in distress after the initial treatments with albuterol should be transferred to the ED from the urgent care center, as they are at increased risk of going into respiratory failure.

Although there is no convincing evidence in the literature that epinephrine given subcutaneously is more effective than nebulized albuterol, many physicians use it for very severe acute exacerbations of asthma that are not responding to the usual treatments. In fact, in the National Heart Lung and Blood Institutes Expert Panel 3, it is listed as a possible treatment for very severe asthma exacerbations; there is however, a comment that this treatment is not supported by convincing evidence in the literature.[4] Epinephrine may act to decrease airway edema, inflammation, and mucus production through its α-adrenergic properties.[5]

One of the authors, Dr. Gernsheimer, has had significant personal experience using subcutaneous epinephrine in severe asthma, and has found it to be very useful. An alternative treatment, also not convincingly supported by the literature but one that many physicians have found useful, is subcutaneous terbutaline. It may have a slightly better adverse reaction profile than epinephrine. Nebulized epinephrine has also been used in the treatment of severe acute asthma.[6]

References

1. Camargo CA Jr, Spooner CH, Rowe BH. Continuous versus intermittent beta-agonists in the treatment of acute asthma. Cochrane Database Syst Rev. 2003;4:CD001115.
2. Brenner BE. Asthma. eMedicine—Emergency Medicine. Updated Apr 23, 2010.
3. Plotnick LH, Ducharme FM. Combined inhaled anticholinergic agents

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References:
1. Lichtenstein SJ, Dorfman M, Kennedy R, Stroman D. Controlling contagious bacterial conjunctivitis. *J Pediatr Ophthalmol Strabismus*. 2006;43:19-26.
2. Data on file. Alcon Laboratories, Inc.

LETTERS TO THE EDITOR

and beta-2-agonists for initial treatment of acute asthma in children. Cochrane Database Syst Rev. 2000;2:CD000060.
4. Guideline: National Asthma Education and Prevention Program. Guidelines for the Diagnosis and Management of Asthma (ER-3). July 2007.
5. Walker DM. Update on epinephrine (adrenaline) for pediatric emergencies. *Curr Opin Pediatr*. 2009;21(3):313-319.
6. Wiebe K, Rowe BH. Nebulized racemic epinephrine used in the treatment of severe asthmatic exacerbation: a case report and literature review. *CJEM*. 2007;9(4):304-308.

Tuberculosis Screening

To the Editor:

I found the summary on tuberculosis screening (Tuberculosis Screening in Urgent Care Medicine, by Jacqualine Dancy, PA-C, MPAS, *JUCM* July/August 2010) to be excellent, and very relevant to our work in urgent care. There is a surprising amount of misunderstanding of the guidelines of interpretation of a positive purified protein derivative (PPD) test, and this article clarifies the guidelines with regard to millimeters of induration in various populations at risk. Thank you!

As an aside, I always ask patients who may be candidates for steroid therapy, such as asthmatics, gout sufferers, patients with a severe atopic or contact dermatitis, etc., whether they have ever had a positive skin test for TB, and consider their response when balancing the risks vs. benefits of even short-term therapy.

Stephen E. Lyons MS, PA-C
W. Cheyenne Clinic Coordinator
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Take Care Health Services

The author responds: This is a great point. It is essential to complete a comprehensive history, including results of past PPD tests, and to assess TB exposure risk factors such as occupational, travel, and living environment when considering immunosuppressive therapy, as these therapies may compromise the patient with latent TB infection enough to convert to active TB.

CORRECTION

An error appeared on page 13 of the July/August issue of *JUCM*, in the article Tuberculosis Screening in Urgent Care Medicine. As originally published, the article said the "Mantoux tuberculin test, commonly referred to as purified protein derivative (PPD)...is performed by injecting **0.5 ml of solution** intradermally...." This is incorrect. It should have said the test "is performed by injecting **0.1 ml (5 tuberculin units**) of solution intradermally...."

We thank attentive readers Nick Ballistrea, RN, Susan Corley, Laurie Marsh, LPN, Bob Siglin, RN, MSN, FNP-BC, and Joseph Toscano, MD for calling this to our attention. ■

JUCM CONTRIBUTORS

Unless you're stuck behind a bus belching exhaust fumes at you, or moving at a snail's pace while a jackknifed tractor trailer is being righted up ahead, you probably don't think much about how many trucks and buses are crossing state lines every day.

Maybe your practice would benefit if you did give the drivers of those vehicles a thought, though. Each one of them has to go through medical certification exams at the behest of the U.S. Department of Transportation. Why shouldn't your urgent care center be one of the venues conducting those exams?

To shed some light on exactly what's involved, we turned to an eminently qualified source. In addition to practicing as a physician with Concentra Medical Centers, **Ellison H. Wittels, MD, FACP** chairs the Concentra Medical Expert Panel on Transportation. He has also served as the senior medical consultant for the Federal Motor Carrier Safety Administration and been a medical consultant for both the Federal Railroad Administration and the U.S. Coast Guard. Prior to joining Concentra, Dr. Wittels spent over 20 years on the faculty of Baylor College of Medicine in Houston, where he founded and was chief of the Baylor Occupational Health Program. He is board certified in both internal medicine and occupational medicine.

His contribution to the September issue, Providing DOT Medical Certification Exams for Commercial Drivers, starts on page 11.

On the more acute side of the yin and yang of urgent care are patients presenting with common complaints ranging from allergic reactions and motion sickness to metabolic or endocrine disorders. Promethazine might be a likely choice for treatment of any of these.

Like many drugs, however, there are potentially serious side effects.

The Creighton University Medical Center team of **Shailendra Saxena, MD, PhD**, **Naureen Rafiq, MD, Liji George, MD, Cara Olsen, PharmD,** and **Mikayla Spangler, PharmD** relays the details of a case in which that became all too clear in Promethazine-induced Tissue Necrosis: A Case Presentation (page 21).

Successfully navigating both the business and clinical challenges of an urgent care center has led many owner/operators to think "bigger" in the most entrepreneurial sense. If you've had the itch to expand your current operation or open another facility, one of the first decisions you will need to make is how to finance your growth. In Investing in Expansion: Do It Yourself, or Take on Investors?, a new article you will find only at *www.jucm.com*, Michael Gotlieb highlights some key considerations.

Mr. Gotlieb is lead partner at *MtAspiringPartners.com*. Previously, he was an executive in strategic marketing and corporate strategy at Motorola/Freescale. He has also started several successful retail and technology entrepreneurial business in his 20-plus year career.

Also in this issue:

Nahum Kovalski, BSc, MDCM reviews new abstracts on midazolam in pediatric seizures, the benefits of hot packs vs. cold packs for neck or back strains, hair apposition vs. suturing in scalp lacerations, and other urgent care-relevant topics.

John Shufeldt, MD, JD, MBA, FACEP pitches the value of making (and, of equal importance, following) checklists in your everyday clinical duties.

David Stern, MD, CPC responds to reader queries on coding for rectal strep, injury exposure visits, when slit lamp exams are or are not billable, and splinting supplies in a hospital-based urgent care center.

Frank Leone, MBA, MPH stresses the need to really understand the value of your occupational health offerings before explaining them to potential clients.

If you have an idea for an article on a clinical or practice management topic, by all means let us know. Editor-in-Chief Lee A. Resnick, MD is eager to expand our roster of contributors. Email him at *editor@jucm.com*

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Scrutiny

LOU ELLEN HORWITZ, MA

Recently at UCAOA, we spent a week with two auditors crawling merrily through all of our financial transactions for the most recent fiscal year.

Don't worry, they were here at our invitation so that we can assure all of our members that their funds are being well taken care of and managed to the highest ethical standards possible. It was actually something we were looking forward to and enjoyed quite a bit. As we went through the process, I was enormously proud of the staff for all of their diligent handling of all of the funds entrusted to us.

I wanted to make sure that you were aware of it, too. We take our responsibility to you very seriously.

That said, I will admit that I ate a lot more candy while they were here than I usually do! Even when you feel good about what you are doing, to have an outside expert come in and critique it is unnerving. There is a combination of feelings—pride, fear, defensiveness, inquisitiveness—that is exhausting by the end of every day.

My most interesting takeaway from this experience, however, was not of a fiscal nature. It is about feedback. If you have been through an audit (or an accreditation survey!), you know that, generally, there are a lot more questions asked than there is feedback offered during the visit. That was a real challenge for the staff early on. They were plagued by "Was my answer okay?" anxiety.

This translates so easily into the urgent care manager's role.

If you are not offering feedback, your people are wondering how they are doing. Whether or not you are an effusive person by nature does not matter; you need to find a way to give *regular* feedback to your employees.

You know this, but it can be hard to remember when everything is moving very quickly.

Where the surprises came for us was experimenting with our own role in the process. By the second day, we started discussing among the staff whether we could ask questions back to the auditors or not.

> *"If you aren't getting the feedback you need,* ask for it."

Were they not giving us feedback because they were trained to withhold comment until the final report, or is it expressly forbidden?

Was it possible we were not being proactive enough in seeking feedback, and they would answer questions if we got brave enough to ask them?

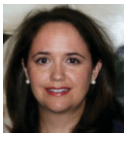
We decided to give it a try and see what happened.

As you have probably guessed (or this would be a pretty boring storyline), we were able to get a wonderful amount of feedback when we asked them for it.

This translates directly to the urgent care employee's role. If you aren't getting the feedback you need, *ask for it.* Worst case: you are no better off than you were before, but in all likelihood what you hear will help you develop a much better and more informative relationship with your boss. Something as simple as "Was that what you wanted?" or "Did I do what you were looking for there?" can be a signal to a reticent superior that they are not giving back enough information on your performance right then and there (where it can be most helpful to you!).

Although there are "organizational norms" about whose job is what, working together in the real world is a two-way street. Take this column as an advisement to at least lift a couple of fingers from the steering wheel more often and salute your fellow drivers.

Better yet, honk your horn! You'll probably get someone's attention. ■



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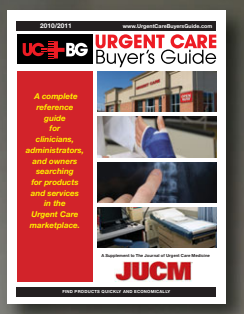

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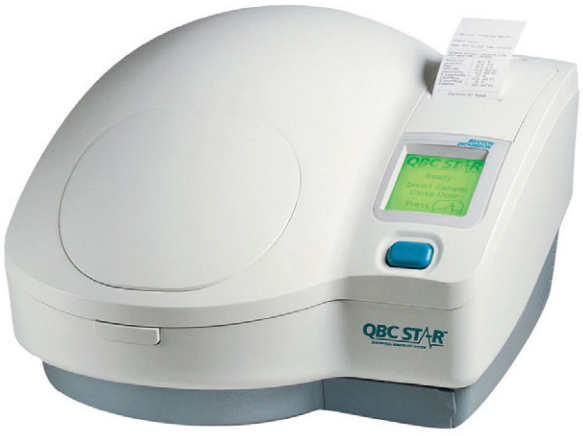

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Providing DOT Medical Certification Exams for Commercial Drivers

Urgent message: The Department of Transportation's responsibility to ensure that commercial drivers are physically qualified to operate in interstate commerce can mean new business for urgent care providers who qualify to perform certification exams.

Ellison H. Wittels, MD, FACP

Introduction

The Federal Motor Carrier Safety Administration (FMCSA)—one of nine operating administrations within the United States Department of Transportation (DOT; **Table 1**)—is tasked with regulating commercial trucks and buses in interstate commerce. That means any trade, traffic, or transportation involving the vehicle and its contents crossing or driven with the intent to cross a state boundary.

More to the point, it is the mission of the FMCSA to reduce crashes, injuries, and fatalities involving large trucks and buses. Although recent data illustrate the success of this mission, a large number of individuals are still killed or injured in crashes involving large trucks and buses (**Figure 1** and **Figure 2**).

In addition to causing fatalities and injuries, crashes involving interstate trucks and buses also have a significant financial impact. Based on the latest data available, the estimated cost of police-reported crashes involving trucks weighing more than 10,000 pounds averaged $91,112 (in 2005 dollars).[2]

Overall, the costs per non-fatal injury crash averaged $195,258, and fatal crashes cost $3,604,518 per crash.[2]

Federal Medical Certification

A major tool the FMCSA employs to this end is Federal Medical Certification, which is required for all drivers of a self-propelled or towed vehicle that transports passengers or property in interstate commerce that is:

Table 1. DOT Operating Administrations

- National Highway Traffic Safety Administration (NHTSA)
- Federal Highway Administration (FHWA)
- Research and Innovative Technology Administration (RITA)
- Pipeline and Hazardous Materials Safety Administration (PHSMA)
- Maritime Administration (MARAD)
- Federal Transit Administration (FTA)
- Federal Railroad Administration (FRA)
- Federal Aviation Administration (FAA)
- Federal Motor Carrier Safety Administration (FMCSA)
- United States Coast Guard (USCG; moved from DOT to Homeland Security)

Figure 1. Fatalities Involving Large Trucks And Buses, 2004-2008[1]

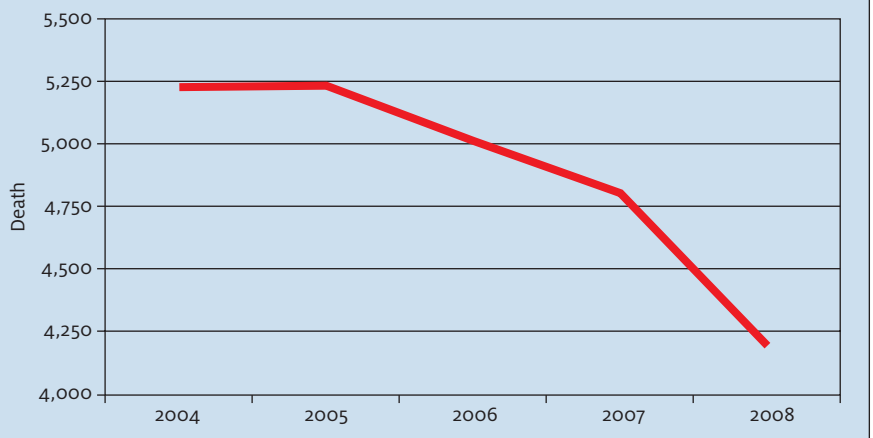
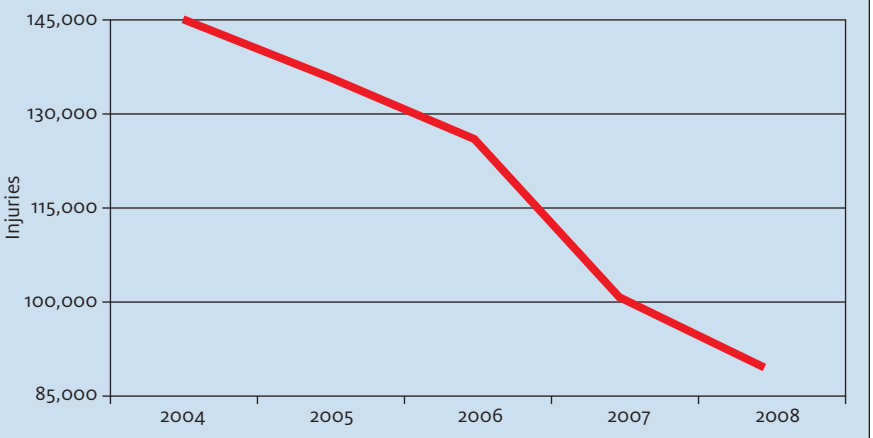


Figure 2. Injuries Involving Large Trucks and Buses, 2004-2008[1]



- ≥10,001 pounds
- designed or used to transport eight or more passengers (including the driver) for compensation
- designed or used to transport 15 or more passengers (including the driver) and is *not* used for compensation
- any size and used to transport placarded hazardous materials.

It is here that the DOT's public safety mandate intersects with the urgent care practitioner's expertise, opening the door to providing additional services for patients who are commercial motor vehicle (CMV) drivers—and to companies who may be looking for new occupational medicine providers.

It should be noted that the DOT does not set fees. Fees are negotiated between the examiner and the payor; this may be the carrier who sends their drivers for examination, or even the driver.

The National Registry of Certified Medical Examiners

The Safe, Accountable Flexible and Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU) became law in 2005. One part of this bill requires that the Federal Motor Carrier Safety Administration implement a National Registry of Certified Medical Examiners (NRCME). Examiners must be on the Registry to certify commercial truck and bus drivers.

Currently, medical doctors, osteopathic physicians, physician assistants, nurse practitioners, and doctors of chiropractic are able to certify commercial drivers if their state licenses al-

low. NRCME does not change the groups that are eligible. To qualify for the registry, the individual must complete an educational course and pass an examination. (Information on the registry is available on the NRCME homepage, *http://nrcme.fmcsa.dot.gov/*.)

Each of the approximately 8 million commercial drivers in interstate commerce must be medically examined and certified at least every 24 months. Many drivers will need to be certified more frequently because of an employer change, having a condition that requires more frequent re-certification, or having a medical exemption; some may need to be certified at least every 12 months if their ability to perform normal duties has been impaired by a physical or mental injury or disease.[3] It is estimated, anecdotally, that as many as 5 million certification examinations are done annually.

Demographic data support that the need for trained, knowledgeable examiners will increase. The U.S. workforce is aging, and the average age of commercial drivers is increasing. The largest growth in the labor pool is expected to be from new employees over 55 years of age.[4]

An aging population is more at risk for chronic disease or sudden incapacitation than a younger population.

The vast majority of commercial drivers are male and over 40 years of age. The average driver is sedentary. Drivers are more overweight and as a group have a higher prevalence of smokers than the general population.

Overall, the CMV drivers are less healthy than the general population, are more likely to have more than two medical conditions, and have a higher-than-average prevalence of cardiovascular disease.

The aging driver population and the health of drivers should make certification decisions challenging. At the same time, the increased risk of injuries and fatalities from commercial vehicle crashes and the demands of their work require that commercial drivers be held to higher physical and psychological standards than drivers of passenger cars.

The Certification Examination

The examiner must consider several guiding principles

Table 2. Areas Covered by the Guidelines and the Medical Advisory Criteria for Evaluation Under 49 CFR Part 391.41

• Loss of limb • Limb impairment • Diabetes • Cardiovascular condition • Respiratory dysfunction • Hypertension • Rheumatic, arthritic, orthopedic, muscular, neuromuscular or vascular disease	• Epilepsy • Mental disorders • Vision • Hearing • Drug use • Alcoholism
The guidelines are available in their entirety at *http://www.fmcsa.dot.gov/rules-regulations/administration/medical.htm*. They also accompany each Medical Examination Report.	

in the context of the driver examination:

- The certification examination determines the presence of medical or mental conditions that could affect the driver's ability to safely operate a motor vehicle. It is not intended to substitute for ongoing medical care.
- The DOT standards and guidelines are the same for all drivers; they are not job-specific.
- Driver certification decisions cannot be based on specific job accommodations or requirements.
- The same form is used for initial certification, re-certification, and return to work. This is a standard form provided by the DOT, available at *http://www.fmcsa.dot.gov/documents/safetyprograms/Medical-Report.pdf*.
- Finally, and importantly, the examiner must remember that the certification examination is not done for the driver or the carrier. The examination is done to protect the other motorists on the road and their passengers.

History

The driver completes the history part of the form. He or she should list all medical diagnoses, the date of onset, treatment, and the treating doctor's name and address. The driver must sign the form to certify that the information is correct.

The medical examiner should review all "YES" answers with the driver, document this on the form, and note any likely effect on safe driving.

The examiner should review all medications, including over-the-counter medications, that the driver has used regularly or recently and discuss with the driver their effectiveness, side effects, and potential hazards. This discussion should also be documented on the examiner's form.

Specific testing required

Several categories of testing are required as part of the certification examination:[3]

1. Vision requirements are regulatory. Requirements include distant acuity, color vision, and peripheral vision. The driver is required to have at least 20/40 distant vision acuity with or without correction in *each* eye and in both eyes together. The Snellen chart is the preferred vision test.

   An optometrist or ophthalmologist may provide the eye exam.

   The use of corrective lenses to pass the vision test requires that the driver wear corrective lenses while operating a commercial vehicle; this must be noted on the Medical Examiner's Certificate. If the driver wears contact lenses or intends to do so while driving, sufficient evidence of tolerance and adaptation to their use should be documented.

   In addition, the driver should have peripheral vision of at least 70 degrees in the horizontal meridian in each eye.

   The applicant must also be able to distinguish traffic control signals and devices showing standard red, green, and amber colors.

   Monocular vision disqualifies the driver.
2. Hearing. The hearing standard requires that the driver first perceives a forced whispered voice at 5 feet with or without a hearing aid in at least one ear, or has an average hearing loss in the better ear at 40 dB at 500Hz, 1000Hz, and 2000Hz with or without a hearing aid.

   If the driver needs a hearing aid to pass the hearing test, then he or she is required to wear a hearing aid while operating a commercial vehicle. This must be noted on the Medical Examiner's Certificate. However, a driver with a hearing aid cannot be tested on an office audiometer because of noise interference, and needs to be referred to an audiologist or hearing aid store for testing.
3. Urine dipstick for protein, specific gravity, blood, and glucose.

The physical examination

The examination requires measuring the driver's blood pressure and pulse, as well as the driver's height and

weight. The guidelines for blood pressure are based on the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure VI. The DOT form lists specific physical assessments. The examiner comments on whether the abnormal findings would affect the driver's ability to operate a commercial motor vehicle safely.

It is helpful to use the hypertension guidelines printed on the form when determining certification for drivers with hypertension.

Table 3. Publication of Guidelines That Inform DOT Recommendations

Guideline	Year published
Neurology	1988
Pulmonary	1991
Psychiatry	1991
Vision	1991/1998
Hearing	1993
Anticoagulation	1996
Cardiovascular	2002
Medical guidelines not in agreement: Sleep disorders, dementia Medical conditions not addressed: Renal disease, musculoskeletal disease, transplants	

At the end of the exam, the examiner must sign the form and indicate whether the driver qualifies for two-year certification, does not meet the standards, or meets the standards but requires more frequent monitoring (making the certification for less than two years).

The examiner must also indicate any corrective device—glasses, contact lenses, or hearing aids—that the driver must use while driving and/or exemptions that the driver must have to legally drive.

After the Medical Examination Report is completed, the examiner may complete and issue a Medical Examiner's Certificate which is given to the driver to show medical clearance, any corrective devices, waivers, or exemptions and the expiration date of the certification.

Standards, Guidelines, and Certification

The DOT Standards and Guidelines are the basis for determining certification of commercial drivers and also are the basis for the NRCME educational course and test.

For our purposes, the guidelines (medical expert reports) and Medical Advisory Criteria provide recommendations for the examiner.

The purpose of the guidelines is to standardize certification of drivers across the country (**Table 2**).

The document goes on to state that "the medical examiner may, but is not required to, accept the recommendations."

Note: The guidelines are *recommendations* and are not legally binding. However, the guidelines are based on expert review and are considered standards of practice. The guidelines are intended to minimize variations among examiners. The examiner should document why a guideline is not followed where applicable. There is, potentially, more liability when a standard of care is not followed.

It should also be noted that "current guidelines" do not necessarily reflect current treatment practices or technology (**Table 3**). Many of the guidelines are outdated, contradictory, or do not address major medical problems.

The DOT Standards are under 391.41. They are regulatory and must be followed. Nine standards are general, and the medical examiner has the latitude to use his or her clinical judgment to determine if the driver meets the standards. The examiner has no latitude regarding the standards for hearing, vision, epilepsy, or insulin-treated diabetes.

In addition, the first time a driver who has had an amputation from the ankle up or wrist up is certified, the driver must undergo a Skill Performance Examination with an FMCSA examiner before being certified.

Currently, the FMCSA is updating its Standards and Guidelines. When faced with deciding certification based on the current guidelines, examiners must use their medical judgment and are free to use other, more current medical recommendations.

Considerations

In deciding Standards and Guidelines, the DOT must consider both the rights of the individual and public safety. Focusing on the driver's right to earn a living in an occupation of their choice makes licensing less restrictive. Alternatively, if the focus is on society's concerns and risk avoidance, licensing is *more* restrictive.

Central to each decision is risk—the probability that an adverse event will occur and the consequences of that adverse event. Tightening regulations beyond what is necessary has the potential to increase illegal driving and impose unnecessary negative economic and sociological impacts.

Most basically, the examiner determines if the applicant is medically suitable to drive a commercial vehicle. The examiner does this by evaluating the CMV driver for any condition that may cause sudden death or incapacitation or a fixed deficit that interferes with safe driving. For the certification examination, the examiner does not determine treatment, act as the driver's physician, or provide specific medical advice

Federal regulations require more than driving. The driver is responsible for:

- pre- and post-trip vehicle safety inspections
- making sure the load is secure
- checking the load before beginning and periodically during a trip.

A bus driver should be able to assist passengers in case of an emergency.

Information from the history, testing, or physical examination may be cause for disqualification, limited certification, certification with restrictions, further evaluation, or consultation.

The presence of a medical condition does not necessarily disqualify a driver if the condition does not affect safe driving or is adequately treated and controlled and is not likely to worsen suddenly.

Findings and conditions that are not disqualifying should also be discussed with the driver. The driver should be referred for appropriate follow-up, particularly if the condition, if neglected, might affect the driver's ability to drive safely in the future. This referral must be documented.

Section 390.3(d) of the FMCSAs allows employers to have more stringent medical requirements. Often, the employer requires not only DOT certification, but also that the driver meet essential job requirements. Additional carrier requirements that do not fall under the DOT should be assessed separately.

Say, for example, a driver is required by the employer's essential job functions to lift 75 pounds. DOT certification does not require lifting 75 pounds to be able

to drive safely; therefore, the examiner can certify the driver regardless of his or her ability to lift 75 pounds. However, the inability to lift 75 pounds would disqualify the driver in terms of the employer's requirements.

In deciding certification, the examiner may:

- certify the driver
- certify with restrictions
- disqualify the driver.

The examiner can certify the driver for a maximum of 24 months. The examiner may also give a shorter certification, such as three months, six months, a year, or some other appropriate time. The examiner may also give a shorter certification while additional testing or consultation is obtained.

Currently, DOT recommends that drivers with cardiovascular disease, diabetes mellitus, or other potentially progressive conditions that can impair safe driving be seen at least annually.

While the examiner may require testing or consultation with a specialist, it is important to note that the final decision on whether to certify the driver remains with the examiner (i.e., the party who signs the certification card is the one with the authority to make the final decision regarding certification).

The specialist may be the authority regarding a specific condition and treatment, but the examiner knows what the DOT medical requirements are for the driver with a specific condition.

Certifying with restrictions

The only two restrictions that the examiner may give on his or her own accord are printed on the certification card; the examiner can restrict the driver to driving only if wearing corrective lenses or a hearing aid. The other restrictions on the card require FMCSA approval.

Current exemption programs

Only the FMCSA can grant exemptions. States may grant waivers, but they are valid only within the state of issuance.

As of this writing, the only active federal exemption programs are the Vision Exemption Program that began in 1998 and the Diabetes Exemption Program, for drivers with insulin dependent diabetes mellitus, that began in 2003.

FMCSA now recommends that the driver seeking an exemption see the medical examiner first. The examiner identifies or requires the driver to correct any other disqualifying conditions. If the CMV driver passes the examination except for the exemption require-

ment, then the certifying medical examiner *must* write the needed exemption on the certification card and long form. The examiner gives the long form and card to the applicant to submit with other required forms to FMCSA.

Qualified under 49 CFR 391.64

This program began in the early 1990s as a research program to determine if drivers on insulin or drivers with monocular vision could drive safely.

There were 2,300 drivers with a vision waiver and 113 drivers with an insulin waiver accepted into the program.[5] In 1994, the court ruled these waiver programs contrary to the law as it was then written. The drivers in the programs were grandfathered in and could continue driving if they remained in good standing with the program, had no progression of the disease, developed no other disqualifying medical problems, and had no disqualifying driving infractions.

To be recertified by the examiner, each driver must have a letter showing their continued participation in the program.

Driving within an exempt intracity zone

In 1988, the states adopted DOT medical requirements. Active drivers whose physical condition was disqualifying under the newly adopted DOT requirements on July 1, 1988 or their first exam thereafter were allowed to drive only in specific zones if their condition did not substantially worsen and they did not transport hazardous materials. They are re-certified annually.

Skill Performance Evaluation (SPE)

Also known as the "alternative standard," this was established in 1999. It allows CMV drivers with fixed musculoskeletal problems or amputation the opportunity for certification if the rest of their certifications meet the requirements.

Disqualified

The driver who does not meet a standard *must* be disqualified. A driver who does not meet the current guidelines *may* be disqualified.

Conclusion

Although the DOT form has specific requirements for the history, testing, and examination, the examiner must still understand the duties of the CMV driver. In addition, the examiner must still use clinical judgment to decide certification. Often, because the guidelines do not cover all situations, the examiner should use more current information.

References

1. U.S. Department of Transportation Federal Motor Carrier Safety Administration. Motor Carrier Safety Progress Report (as of 3/31/10).
2. Zaloshnja E, Miller T. Unit costs of medium and heavy truck crashes. Final report for Federal Motor Carrier Safety Administration. Pacific Institute for Research and Evaluation. 2006.
3. U.S. Department of Transportation Federal Motor Carrier Safety Administration. Medical Advisory Criteria for Evaluation Under 49CFRPart391.41.
4. Purcell PJ. *Monthly Labor Review Online*. 2000;123(10).
5. Qualifications for drivers; vision and diabetes; limited exemptions; final rule. *Federal Register*. 1996;61(59):13338.

Case Report

Promethazine-induced Tissue Necrosis: A Case Presentation

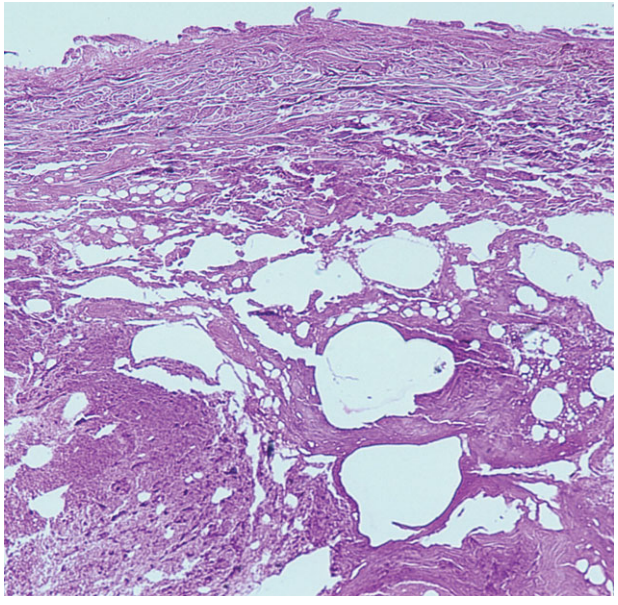
Urgent message: Due to its versatility, the urgent care clinician will find promethazine an appropriate choice in many situations. Awareness of potentially serious side effects maximizes the chance of good outcomes while minimizing risk.

Shailendra Saxena, MD, PhD, Naureen Rafiq, MD, Liji George, MD, Cara Olsen, PharmD, and Mikayla Spangler, PharmD

Introduction

Promethazine (Phenergan) is a drug commonly prescribed in emergency departments and urgent care clinics for treatment of a variety of conditions (**Table 1**). Because it possesses antihistamine, sedative, anti-motion sickness, and anti-emetic effects, it is often used for nausea and vomiting.

Physicians may not be fully aware that it is also toxic to the intima of blood vessels and surrounding connective tissue; this can result in severe tissue damage and necrosis.



Although this is not a common side effect of this medicine, the purpose of this article is to bring awareness to and familiarize urgent care physicians with serious complications which *can* happen with this commonly used medication.

Case Presentation

A 48-year-old African-American male presented to the emergency department with an abscess on the right lower abdominal wall and a four-day history of nausea.

The patient underwent incision and drainage (I&D) of the abscess and received 25 mg of promethazine by intramuscular route on the right gluteal area.

Immediately after, he reported a severe burning sensation going down his right thigh. It subsided after an hour, at which time he was discharged home to follow up with his primary care physician.

Two days later, the patient presented to his primary care clinic for the repacking of I&D. He complained that the pain at the injection site was worse—so much so that he was unable to walk.

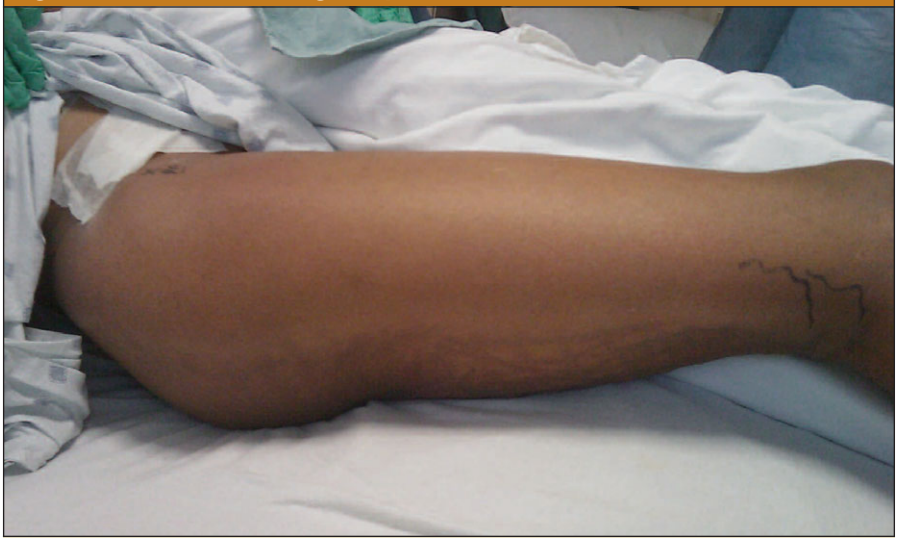
On physical examination, he had:
temperature: 100.1° F
heart rate: 96 BPM
respiration: 4 RPM
blood pressure: 110/75 mmHg.

His right thigh was warm, tender, and swollen; erythema extended from the right hip down to the knee (**Figure 1**).

Table 1. Common Uses of Promethazine

- *Allergic reactions*
  - hay fever
  - urticaria
  - vasomotor rhinitis
  - skin allergies
  - poison ivy
  - insect bites
- *Relief of pruritus due to various dermatologic conditions*
- *Nausea and vomiting of various etiologies*
  - motion sickness
  - radiation sickness
  - surgery
  - anesthesia and gastroenteritis
  - centrally acting emetics
  - metabolic or endocrine disorders

Figure 1. Cellulitis from right hip to knee.



The patient was immediately admitted to the hospital and had a complete work-up for inpatient treatment of cellulites. He had an elevated white cell count of 14,000, with no bands and a sodium level of 120 mEq.

CT scan of the right thigh demonstrated multiple congruent abscesses extending from the injection site on the right hip to the knee. The surgical team was consulted for possible fasciotomy of the right thigh.

Hospital Course

The patient was admitted for the treatment of cellulites and possible fasciotomy of the right thigh. He was started on intravenous fluids, the broad-spectrum antibiotic piperacillin-tazobactam (Zosyn), and the pain medication hydromorphone (Dilaudid). He had fasciotomy and wound vac placement. The culture grew methicillin-resistant staphylococcus aureus (MRSA), for which IV vancomycin was added in addition to piperacillin-tazobactam.

Subsequently, the patient was taken to the operating room a few more times for wound vac changes. He remained in the hospital for one month and was later transferred to a rehabilitation facility.

Discussion

It is apparent in reviewing the literature that promethazine can cause potentially serious side effects, ranging from mild edema to soft tissue necrosis at the site of injection.

Administering promethazine by intravenous or intra-arterial routes has been found to result in arterial spasm and, in turn, to impaired circulation and gangrene in specific cases.[1] Extravasations of promethazine in the soft tissue are also believed to cause similar effects, as shown in our patient.

In 1999, Malesker, et al reported a similar experience with a 43-year-old woman who was admitted for a hysterectomy and received post-operative promethazine 25 mg every two hours by intravenous route for nausea and vomiting.[2] She developed pain, swelling, and erythema at the site of injection in her right hand.

Patrick J. Marshfied in 2004 described the case of a professional guitar player who was awarded $7.4 million in a lawsuit for pain and suffering following complications associated with the intra-arterial injection of promethazine. The patient was simply treated for migraine headache, initially.[3]

More recently (2009), Grissinger described a case of a 19-year-old woman who received promethazine by intravenous route and developed pain and swelling at the site of injection in her right arm.[4] Her arm and fingers became purple and blotchy; eventually, she underwent amputation of the thumb, index finger, and the top of her middle finger.[4]

Our case report clearly demonstrates the potential for serious complications associated with promethazine.

Continued on page 26

ABSTRACTS IN URGENT CARE

On Pediatric Seizures, Hot Packs vs. Cold Packs, Hair Apposition vs. Suturing Scalp Lacerations, Delayed Intracranial Hemorrhage in Children, Pertussis in California, Immobilization After Colles Fracture Reduction, Typical Angina vs. Atypical Chest Pain, and Battery Ingestion Hazards

■ NAHUM KOVALSKI, BSc, MDCM

Each month, Dr. Nahum Kovalski reviews a handful of abstracts from, or relevant to, urgent care practices and practitioners. For the full reports, go to the source cited under each title.

Non-intravenous Midazolam Effectively Terminates Pediatric Seizures

Key point: A meta-analysis reveals that non-IV midazolam is as effective as or superior to IV or rectal diazepam for stopping seizures in children and young adults.

Citation: McMullan J, Comilla S, Pancioli A, et al. Midazolam versus diazepam for the treatment of status epilepticus in children and young adults: A meta-analysis. *Acad Emerg Med*. 2010;17(6):575-582.

Although intravenous (IV) lorazepam is considered first-line therapy for status epilepticus, this therapy is impractical for patients who do not have IV access. Diazepam can be administered either intravenously or rectally, but is less effective and associated with a higher risk for respiratory depression. Midazolam—although not formally recommended for treatment of seizures—can be given via IV, intramuscular (IM), intranasal (IN), or buccal routes.

These authors conducted a meta-analysis of randomized, controlled trials published from 1950 to 2009 that compared non-IV midazolam to diazepam by any route for initial treatment of status epilepticus in emergency department patients. Six studies involving 774 patients (age range: newborn to 22 years) met inclusion criteria.

Nahum Kovalski is an urgent care practitioner and assistant medical director/CIO at Terem Emergency Medical Centers in Jerusalem, Israel.

In pooled analysis of medications administered by any route, midazolam was superior to diazepam for terminating seizures, with a number needed to treat (NNT) of seven to demonstrate midazolam benefit.

IM or IN midazolam was as effective as IV diazepam, while buccal midazolam was superior to rectal diazepam in achieving seizure control. Time to seizure cessation was similar in the midazolam and diazepam groups in the three studies that evaluated this outcome. The analysis was not sufficiently powered to detect differences in frequency of respiratory complications. Sensitivity analysis revealed that dose of medication and duration of seizure had no effect on differences between treatment groups.

Buccal, intramuscular, or intranasal midazolam is a cheap, easily administered, and effective alternative for children with seizures who present without IV access.

[Published in *J Watch Emerg Med*, June 18, 2010—Katherine Bakes, MD.] ■

Hot Packs and Cold Packs Are Equally Effective for Treating Neck or Back Strain

Key point: Whether these therapies provide any benefit over ibuprofen alone is unclear.

Citation: Garra G, Singer AJ, Leno R, et al. Heat or cold packs for neck and back strain: A randomized controlled trial of efficacy. *Acad Emerg Med*. 2010;17(5):484-489.

Pain management is the primary concern when treating patients with acute neck or back strain. Hot packs or cold packs are often recommended—despite little evidence that

either is effective—particularly when used with standard therapy, such as nonsteroidal anti-inflammatory drugs.

In a prospective study, 60 adult patients who presented to an academic emergency department with acute neck or back strain received single 400 mg doses of oral ibuprofen and were then randomized to application of hot packs or cold packs to the strained area for 30 minutes.

Patients rated pain on a 100 mm visual analog scale and a verbal rating scale before receiving ibuprofen and immediately after hot pack or cold pack treatment.

The mean decrease in pain scores after treatment was statistically significant in both groups (9 mm in the hot pack group and 8 mm in the cold pack group), but did not meet the authors' predefined threshold for clinical significance (15 mm).

Pain scores did not differ significantly between the two groups before and after treatment. Use of rescue analgesia also did not differ significantly between the two groups. About 80% of patients in each group expressed a desire to use their respective packs in the future.

Let's admit it; we've all recommended hot or cold local therapy for acute neck or back strain. This small study suggests that, at least in terms of measurable short-term relief of pain, neither therapy provides clinical benefit when ibuprofen is prescribed in analgesic doses.

[Published in *J Watch Emerg Med*, June 4, 2010—Diane M. Birnbaumer, MD, FACEP.] ■

Hair Apposition Technique is Better Than Suturing Scalp Lacerations

Key point: Hair apposition appears to be both practical and effective in treating minor scalp lacerations.

Citation: Weick R, Stevermer JJ. A randomized controlled trial comparing the hair apposition technique with tissue glue to standard suturing in scalp lacerations (HAT study). *Ann Emerg Med*. 2002;40:19-26.

Suturing scalp lacerations can be a painful, time-consuming procedure. Often, it requires shaving a portion of the scalp and subsequent suture removal. The search for a less invasive means of wound closure led the authors to develop the hair apposition technique.

After cleaning the wound, and without anesthesia, four or five strands of hair from each side of the laceration are twisted together once, with a drop of tissue adhesive placed on the twist to hold it in place. A series of twists are placed over the laceration to appose the wound. Patients are instructed not to wash their hair for 2 days.

This study compared the hair apposition technique with standard suturing methods. It was performed in emergency departments at two tertiary care centers in Singapore. The authors enrolled 189 patients who had linear, non-stellate scalp lacerations <10 cm in length. They did not include patients with severely contaminated wounds, arterial bleeding not controlled with five minutes of pressure, hair length <3 cm, and medically unstable patients.

In a concealed fashion, 93 patients were randomized to suturing and 96 patients to the hair apposition technique. Both groups had their wounds irrigated and cleansed in a similar fashion. The control group was shaved according to local practice and received an injection of local anesthetic; young children sometimes received oral sedation.

No subject in the study group received anesthesia or sedation.

A senior physician who was not involved in the initial treatment evaluated subjects after 1 week; sutures were removed at that time as well. If complications were noted, the patient was followed weekly for as long as 4 weeks.

Overall, complications were reduced by the hair apposition technique (7.4% vs. 21.5%).

Most of the difference in complication rates can be attributed to the decreased scarring (at one week) found in the hair apposition technique group. Wound breakdown, bleeding, and infection rates were similar in both groups. The hair apposition technique was quicker than suturing (median time of five vs. 15 minutes).

Less pain was reported in the hair apposition technique group (median score 2 vs. 4 [out of 10 possible]); 84% of subjects in this group claimed they would be willing to have the procedure in the future, compared with only 10% in the suture group. ■

Incidence of Delayed Intracranial Hemorrhage in Children After Uncomplicated Minor Head Injuries

Key point: The occurrence of delayed diagnosis of intracranial hemorrhage among children who present with uncomplicated minor head injuries is rare.

Citation: Hamilton M, Mrazik M, Johnson DW. *Pediatrics*. 2010;126(1):e33-39. Epub 2010 Jun 21.

This was an eight-year, retrospective, cohort study of children <14 years of age who presented to EDs in the Calgary Health Region between April 1992 and March 2000. Cases of uncomplicated minor head injuries and delayed diagnosis of intracranial hemorrhage (intracranial hemorrhage not apparent until ≥6 hours after injury) were identified.

An estimated 17,962 children with uncomplicated minor head injuries were evaluated at Calgary Health Region EDs. Two and eight children were identified as having delayed diagnoses of intracranial hemorrhage with and without delayed deterioration in level of consciousness (Glasgow Coma Scale scores of <15), respectively. The proportions of children

with uncomplicated minor head injuries with delayed diagnoses of intracranial hemorrhage with and without deterioration in level of consciousness were ~0.00% (0 of 17,962 children) and 0.03% (five of 17,962 children), respectively.

On the basis of population data for the Calgary Health Region, the incidences of delayed diagnosis of intracranial hemorrhage with and without deterioration in level of consciousness were 0.14 and 0.57 cases per 100,000 children per year, respectively. ■

California Seeing Possibly Worst Pertussis Epidemic in 50 Years

Key point: If people are visiting from California, we should be more suspect of the possibility of pertussis.

Citation: California Department of Public Health. Whooping cough epidemic may be worst in 50 years. Available at: *www.cdph.ca.gov/Pages/NR10-041.aspx*.

California had 910 confirmed cases of pertussis as of June 15—a fourfold increase over the same period in 2009. Health departments are looking into an additional 600 suspected cases.

Five infants under age 3 months have died from pertussis this year. Infants are not fully protected against the disease until they complete the initial series of three vaccinations by age 6 months, so the California Department of Public Health is urging birthing hospitals to vaccinate new parents before sending them home with their newborns.

The CDC is not reporting any other major pertussis outbreaks around the country, according to the *New York Times*, but reporting can be delayed. ■

Similar Results from Three Immobilization Techniques After Colles Fracture Reduction

Key point: Outcomes were similar at 8 weeks and at 6 months with circumferential casting, volar-dorsal splinting, and modified sugar-tong splinting.

Citation: Grafstein E, Stenstrom R, Christenson J, et al. A prospective randomized controlled trial comparing circumferential casting and splinting in displaced Colles fractures. *CJEM*. 2010;12(3):192-200.

Nonoperative immobilization of fractures can be accomplished by several methods, including circumferential casting, volar-dorsal splinting, and modified sugar-tong splinting. Researchers compared the efficacy of the three techniques in a prospective randomized study of 101 adult patients who presented to an ED in Vancouver, British Columbia, with closed, isolated first-time distal radius fractures and who did not have neuromuscular deficit. Patients were randomized after successful reduction with procedural sedation in the ED.

Eighty-two percent of patients were available for follow-up assessment at eight weeks, and 61% were available at six months. At both time points, rate of loss of anatomic position; disability of the arm, shoulder, and hand (DASH) scores; and median pain scores were similar among the three groups.

A common emergency medicine admonition is, "Don't put a circular cast on a fresh fracture" because of the risk for pressure syndromes. Yet, circular casting is still used in some cases because it is believed to provide better immobilization than other techniques. This study failed to demonstrate better outcomes with casting, and risking compartment syndrome is not advisable, even if the risk is small.

Simple volar-dorsal or modified sugar-tong techniques are both acceptable forms of immobilization after reduction; circular casting adds risk but no benefit.

[Published in *J Watch Emerg Med*, July 9, 2010—Kristi L. Koenig, MD, FACEP.] ■

Typical Angina vs. Atypical Chest Pain

Key point: Presence and type of symptoms did not predict inducible myocardial ischemia in patients presenting to an emergency department.

Citation: Hermann LK, Weingart SD, Yoon YM, et al. Comparison of frequency of inducible myocardial ischemia in patients presenting to emergency department with typical versus atypical or non-anginal chest pain. *Am J Cardiol*. 2010;105(11):1561-1564.

Patients with acute coronary syndromes (ACS) present with a wide variety of symptoms. Investigators at a single center in New York City conducted a retrospective study involving 2,525 patients with no previous history of myocardial infarction or coronary revascularization who were evaluated for ACS in an emergency department–based chest pain unit.

Typical angina was defined as "the presence of substernal chest pain or discomfort that was provoked by exertion or emotional stress and was relieved by rest and/or nitroglycerin." All patients underwent provocative stress testing after serial biomarkers were obtained.

Presenting symptoms did not vary significantly by sex, age, or history of diabetes. Ischemia was induced by stress testing in 14% of 231 patients with typical angina, 11% of 2,140 patients with atypical chest pain, and 16% of 153 patients with no chest pain at presentation. Thus, patients with typical angina were not significantly more likely than those with no or atypical chest pain to have inducible myocardial ischemia.

In this study, patients presenting with typical angina symptoms were no more likely than those with no or atypical

symptoms to have inducible myocardial ischemia. Although data on the presence and type of chest pain were recorded before stress testing, they were collected hours after presentation, and we cannot infer if or how they affected decisions about testing and patient disposition.

[Published in *J Watch Cardiol,* July 7, 2010—Joel M. Gore, MD.] ■

Implications of Increasing Battery Ingestions

Key point: Battery ingestions are increasing in frequency and are very high-risk events.

Litovitz T, Whitaker N, Clark L, et al. Emerging battery-ingestion hazard: Clinical implications. *Pediatrics*. 2010;125(6):1168-1177.

Recent cases suggest that severe and fatal button battery ingestions are increasing and that current treatment may be inadequate. The objective of this study was to identify battery ingestion outcome predictors and trends, define the urgency of intervention, and refine treatment guidelines.

Data were analyzed from the National Poison Data System (56,535 cases, 1985-2009); the National Battery Ingestion Hotline (8,648 cases, July 1990-September 2008); and medical literature and National Battery Ingestion Hotline cases (13 deaths and 73 major outcomes) involving esophageal or airway button battery lodgment.

All three data sets signal worsening outcomes, with a 6.7-fold increase in the percentage of button battery ingestions with major or fatal outcomes from 1985 to 2009 (National Poison Data System). Ingestions of 20- to 25 mm diameter cells increased from 1% to 18% of ingested button batteries (1990–2008), paralleling the rise in lithium-cell ingestions (1.3% to 24%).

Outcomes were significantly worse for large-diameter lithium cells (≥20 mm) and in children < 4 years.

The 20 mm lithium cell was implicated in most severe outcomes. Severe burns with sequelae occurred in just two to 2.5 hours. Most fatal (92%) or major outcome (56%) ingestions were not witnessed. At least 27% of major outcome and 54% of fatal cases were misdiagnosed, usually because of nonspecific presentations. Injuries extended after removal, with unanticipated and delayed esophageal perforations, tracheoesophageal fistulas, fistulization into major vessels, and massive hemorrhage.

Revised treatment guidelines promote expedited removal from the esophagus, increase vigilance for delayed complications, and identify patients who require urgent radiographs. ■

In this case, the patient was treated aggressively by the surgical team on board and had significant improvement. However, we believe that to date there have not been any scientific studies to summarize definitive treatment for the catastrophic consequences that may occur with promethazine and other drugs (e.g., phenytoin, thiopental, and propofol).[5-7]

Local anesthetic agents to promote vasodilatation, anticoagulation therapy, sympatholytic therapy (i.e., Stellate ganglion block), and limb elevation have all been described in case studies, with varying results.[8-10] Nevertheless, it is important to point out that in case of inadvertent intra-arterial injection, the catheter should be left in place in order to administer emergency medications. The true extent of the problems associated with promethazine may not be known.

We, along with the manufacturer's recommendations, suggest that the following strategies be considered to prevent or minimize tissue damage:

- As 25 mg/ml is the highest strength of promethazine, try to use this concentration instead of 50 mg/ml.
- The starting dose should be between 6.26 mg/ml and 12.5 mg/ml, especially in elderly patients.
- Dilute 25 mg/ml of promethazine in 10 ml to 20 ml of normal saline (or prepare it in mini bags of normal saline).
- Promethazine should be administered only via a large-bore vein, such as the central venous catheter or deep intramuscular.
- IV promethazine should be administered over 10 to 15 minutes.
- Before administration, advise patients to let the physician know immediately whether pain or burning occur during or after injection. ■

References

1. Reents S, ed. *Clinical Pharmacology.* Vol. 1.16 Tampa, FL: Gold Standard Multimedia: 1998.
Malesker MA, Malone PM, Cingle, et al. Extravasation of i.v. promethazine. *Am J Health Syst Pharm.* 1999;56:1742-1742.
2. Marshfield PJ. Woman wins $7.4 million jury award after she loses arm. *The Barre Monlpelier Times Argus*; Barre, VT; March 19, 2004.
3. Grissinger M. Preventing serious tissue injury with intravenous promethazine (Phenergan). *Medication Errors.* 34:175-176, 2009.
4. Twardowschy CA, Paola LD, Germiniani FMB, et al. Soft-tissue necrosis as a result of intravenous leakage of phenytoin. *Neurology.* 2009;73:e94-e95.
5. MacPherson RD, Rasiah RL, McLeod LJ. Intra-arterial thiopentone is directly toxic to vascular endothelium. *Br J Anaesth.* 1991;67(5):546-552.
7. Chong M, Davis TP. Accidental intra-arterial injection of propofol. *Anesthesia.* 1987;42(7):781-782.
8. Crawford CR, Terranova WA. The role of intra-arterial vasodilators in the treatment of inadvertent intra-arterial injection injuries. *Ann Plast Surg.* 1990;25:279-281.
9. Zachary LS, Smith DJ, Heggers JP, et al. The role of thromboxane in experimental inadvertent intra-arterial drug injections. *J Hand Surg.* 1987;12(2):240-245.
10. Keene JR, Buckley KM, Small S, et al. Accidental intra-arterial injection: A case report, new treatment modalities, and a review of the literature. *J Oral Maxillofac Surg.* 2006;64(2):965-968.

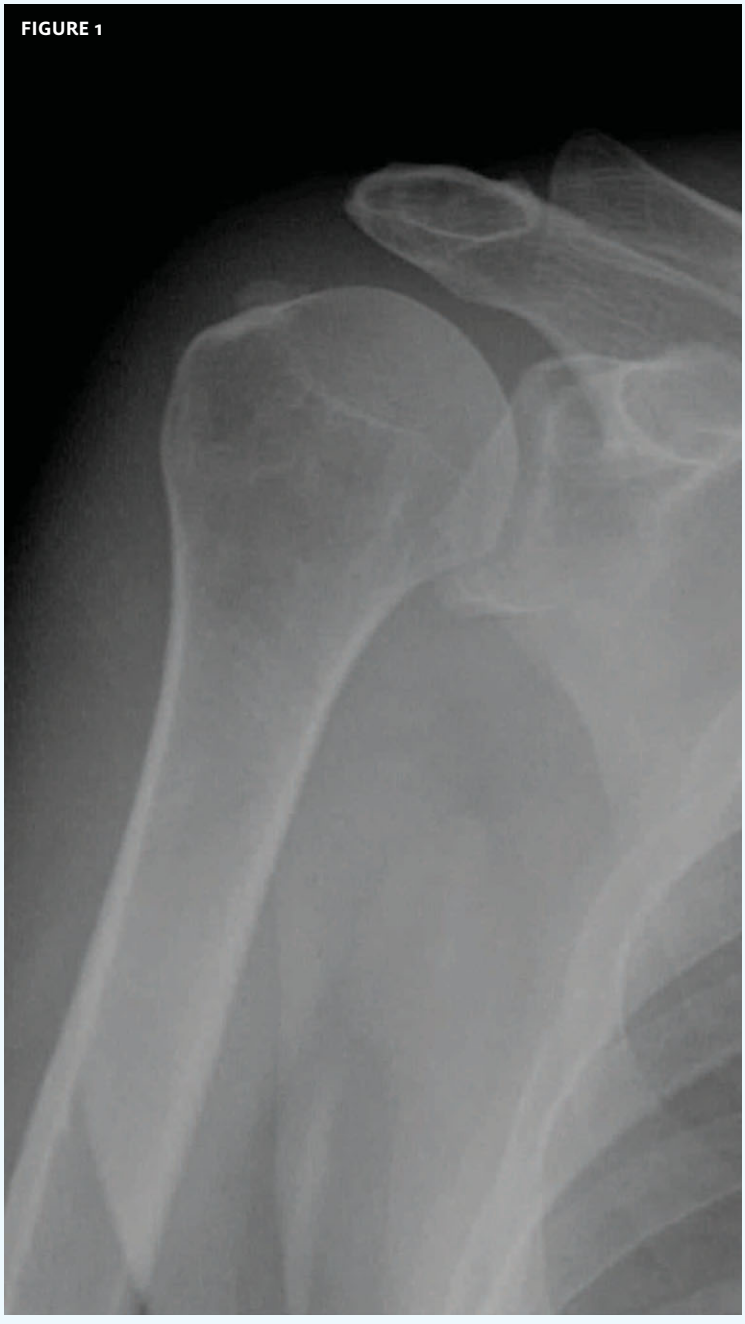
INSIGHTS IN IMAGES

CLINICAL CHALLENGE CASE 1

In each issue, *JUCM* will challenge your diagnostic acumen with a glimpse of x-rays, electrocardiograms, and photographs of dermatologic 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*.

FIGURE 1



The patient is a 62-year-old who presents with a primary complaint of right shoulder pain that developed over time.

The patient denies any trauma. The patient is well appearing, and the history and examination are unremarkable.

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

Resolution of the case is described on the next page.

THE RESOLUTION

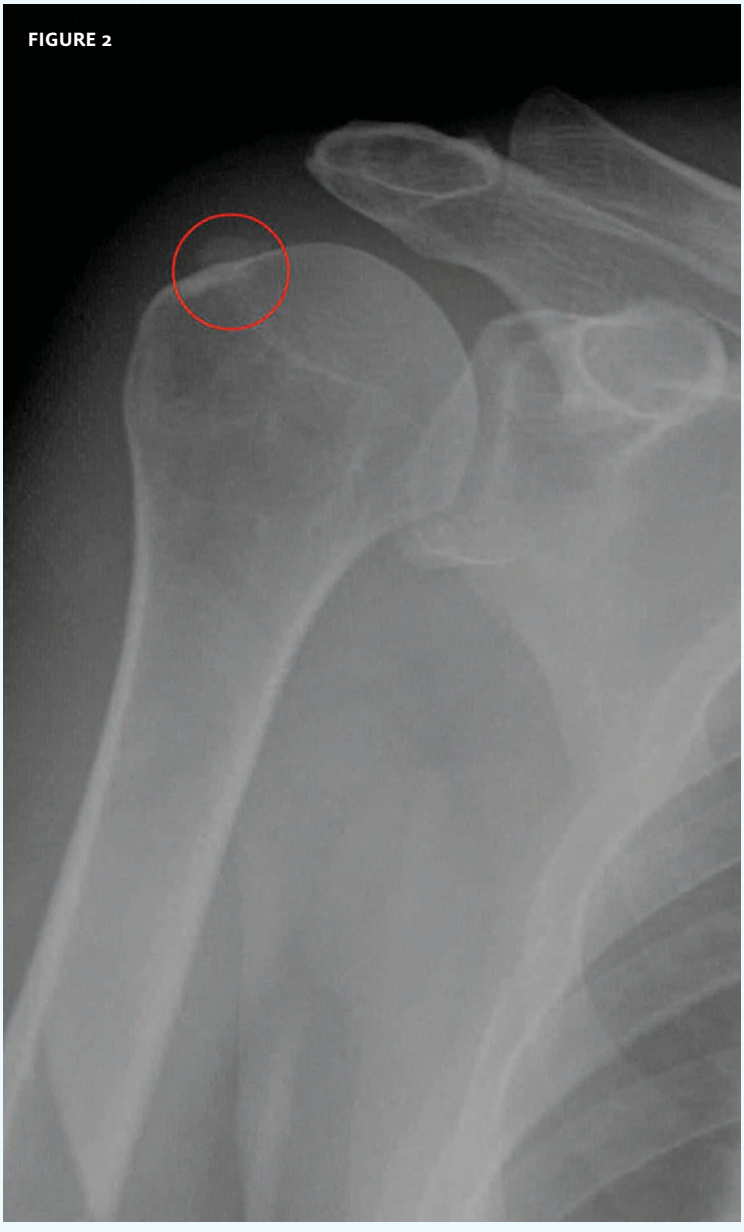


FIGURE 2

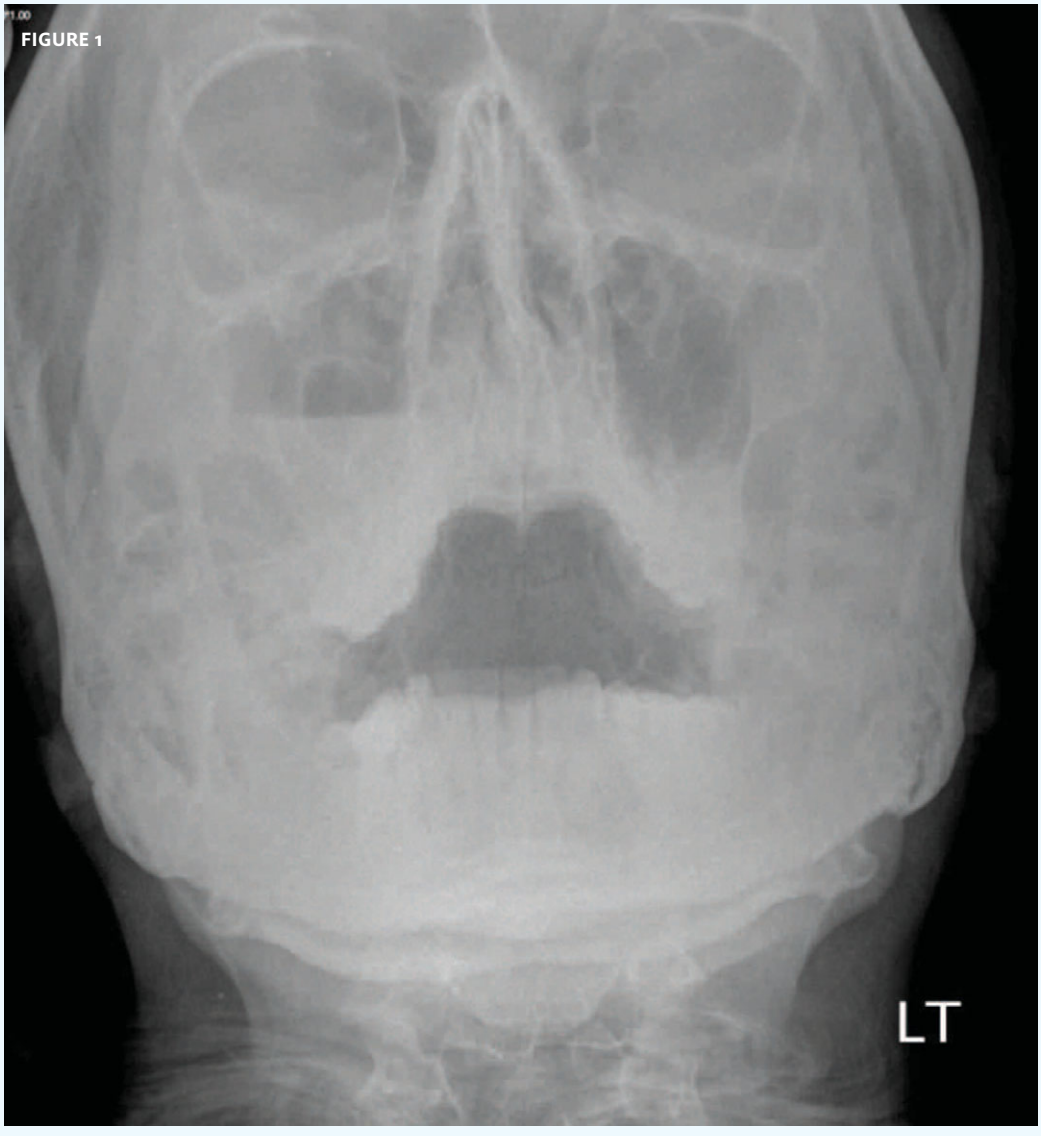
The x-ray shows calcification along the head of the humerus, which is consistent with a calcific tendinitis.

This patient was advised to follow up with an orthopedist. One might also consider a local cortisone injection, with or without physical therapy, in such a case.

Acknowledgment: Case presented by Nahum Kovalski, BSc, MDCM, Terem Emergency Medical Centers, Jerusalem, Israel.

CLINICAL CHALLENGE CASE 2

FIGURE 1



The patient is a 32-year-old man who presents after experiencing a blow to the face while falling from a bicycle.

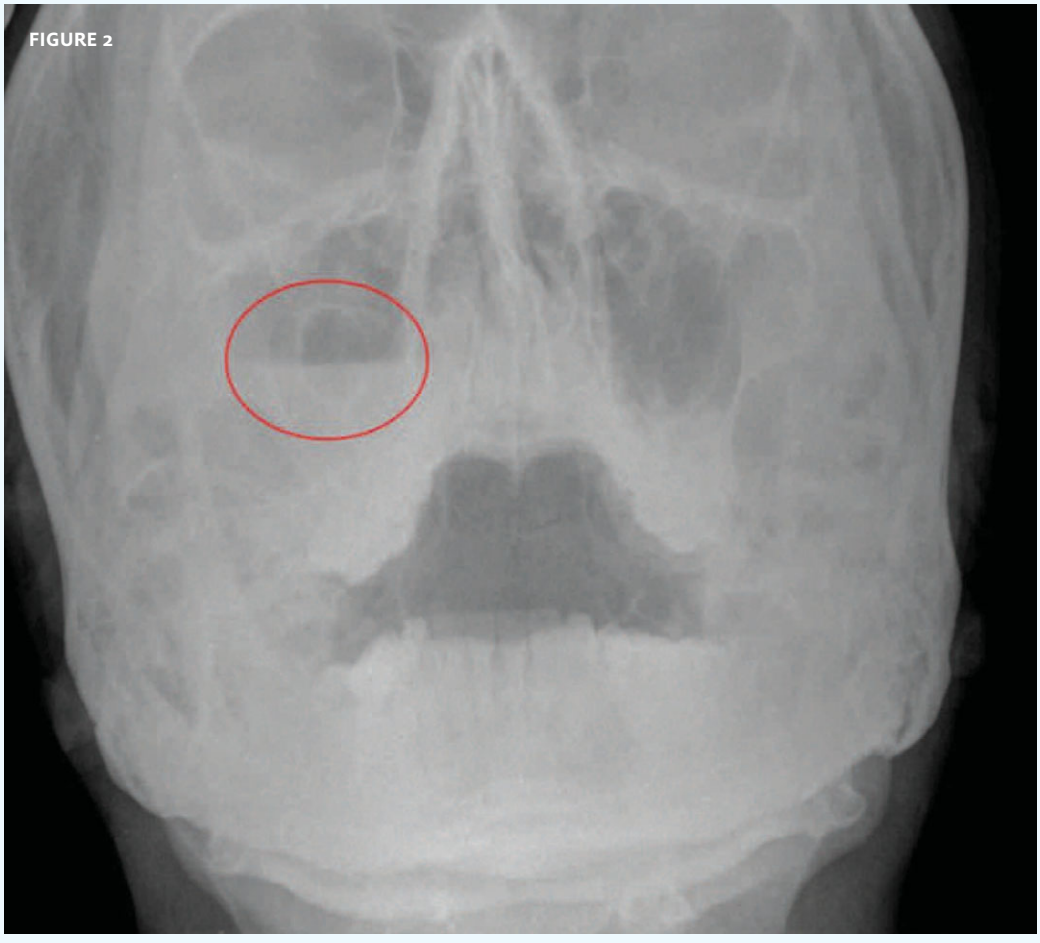
The patient complains of tenderness over the front of his face. Neurological exam is normal. You note that his neck is supple.

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

Resolution of the case is described on the next page.

THE RESOLUTION

FIGURE 2



The circled portion of the x-ray shows an air-fluid level in the right maxillary sinus. This raises the possibility of an orbital fracture with bleeding into the sinus.

It is very important to verify that there is *no* limitation in range of motion (ROM) of the eye (i.e., entrapment).

CT of the facial bones, whenever available, is becoming the standard for imaging facial trauma. CT is extremely useful for identifying soft tissue complications of facial bone fractures and assists with disposition management.

Consultation with a facial surgeon (usually plastic surgery or otolyrangology) is necessary for all suspected facial bone fractures.

Acknowledgment: Case presented by Nahum Kovalski, BSc, MDCM, Terem Emergency Medical Centers, Jerusalem, Israel.

These cases are among hundreds that can be found in Terem's online X-ray Teaching File, with more being added daily. Free access to the file is available at https://www2.teremi.com/xrayteach/. *A no-cost, brief registration is required.*

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CODING Q&A

Coding for Rectal Strep and Injury Exposure Visits, Billing for Slit Lamp Exams, and a Follow-up on Splinting

DAVID STERN, MD, CPC

Q. What is the correct ICD-9 code for rectal strep?

– *Question submitted by Cindy Reisbeck, Littleton, CO*

A. There are several possible codes. The specific ICD-9 code would depend on a more specific diagnosis. For streptococcal infections in the rectal or perirectal area, there are several possible correct codes, as streptococcal species can cause multiple different types of localized conditions.

For cellulitis, the correct code would be 566; for erysipelas, the correct code is 035; for impetigo the correct code would 684; and for necrotizing fasciitis the correct code would be 728.86 (see **Table 1**).

Table 1. Coding Streptococcal Infections in the Rectal or Perirectal Area

ICD-9 Code	*Description*
566	Cellulitis, rectal or perirectal
035	Erysipelas
684	Impetigo
728.86	Necrotizing fasciitis ("flesh eating" bacterial infection)

Q. How do you code out for injury exposure visits (mostly for needlestick injuries) and for hepatitis B immune globulin (HBIg) and subsequent visits for the three-month and six-month labs?

– *Question submitted by Carlene Cox, Genesis FirstCare, Zanesville, OH*

David E. Stern, MD, CPC is a certified professional coder. He is a partner in Physicians Immediate Care, operating 12 urgent care centers in Oklahoma and Illinois. Stern serves on the Board of Directors of the Urgent Care Association of America and speaks frequently at urgent care conferences. He is CEO of Practice Velocity (*www.practicevelocity.com*), providing urgent care software solutions to more than 500 urgent care centers. He welcomes your questions about coding in urgent care.

A. You would code all of these visits with the appropriate E/M code. Follow-up visits that do not involve the doctor may be coded with 99211, if your staff delivers and documents an appropriate level of care.

If more than 50% of provider face-to-face time involves counseling, then E/M codes may be coded by time.

For many of these visits, you might use the ICD-9 code V15.85 (Personal history of contact with and (suspected) exposure to potentially hazardous body fluids). Prior to 2010, there was no appropriate code for patients that had only a suspected exposure to body fluids, but the definition of this code has been updated this year, to include even a *suspected* exposure.

For the HBIg, you should use the injectable supply code 90371 (Hepatitis B immune globulin (HBIg), human, intramuscular use) and the code for intramuscular injection 96372 (Therapeutic, prophylactic, or diagnostic injection (specify substance or drug); subcutaneous or intramuscular).

Table 2 reviews the updated (in 2009) CPT codes for injections.

Table 2. Updated CPT Codes for Injections

CPT	*Injection type*	*Route*	*Add-on code*
96372	Prophylactic, Therapeutic or Diagnostic	SQ or IM	No
96373	Prophylactic, Therapeutic or Diagnostic	Intra-arterial	No
96374	Prophylactic, Therapeutic or Diagnostic	IV	No
96375	Prophylactic, Therapeutic or Diagnostic	Additional IV (new substance)	Yes
96376	Prophylactic, Therapeutic or Diagnostic	Additional IV (new substance)	Yes

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Cleared for Takeoff

JOHN SHUFELDT, MD, JD, MBA, FACEP

I like checklists. I use them while treating patients, flying, cooking, and training. Despite the fact that I have a few thousand hours behind the controls of a variety of aircraft, I still use them every time I fly.

Why then, if I believe I am a fairly competent pilot, do I need to rely on something as pedestrian as a checklist for things that I have done countless times?

For example:

Alternator switch:	On
Oil pressure in 30 sec:	25 PSI
Clutch light:	Out
RPM:	60-70%
Mag drop at 75%:	7% max in 2 sec
Sprag clutch check from 75% RPM:	Needles split

Here's why:

On August 4, 2010 an SR22 (a very sleek, single-engine prop plane with a built-in parachute) crashed while attempting to return to a Phoenix airport. The pilot, who had just departed from Phoenix heading to North Carolina, radioed the tower that he was returning to close a door and that he did not require any assistance. Moments later, he crashed into the side of a building and was killed on impact.

On August, 2, 2010, a Phoenix-based Velocity (a five-passenger homebuilt aircraft) had just departed from Montgomery Field in San Diego when the pilot radioed that the door was open and that he was returning to the field. A few seconds later the plane crashed onto a golf course, killing three of the five family members on board. The father and daughter are in critical condition.

Next item on the checklist:

Doors: Closed and latched

Although the aviation community, at least in Phoenix where I am based, is fairly small, I did not know either of these pilots.

John Shufeldt is the founder of the Shufeldt Law Firm, as well as the chairman of the board of NextCare, Inc., and sits on the Editorial Board of *JUCM*. He may be contacted at *JJS@shufeldtlaw.com*.

I learned, however, that both were considered highly skilled, diligent, and safety-conscious.

How then, did something so ridiculous, so obvious, and so easily preventable end their lives? What did they miss, or what could they have done differently?

Checklists, as you will learn from the following excerpt from the book, *The Checklist Manifesto* by Atul Gawande, MD, were started in the U.S. Army Air Corp:

> "On October 30, 1935, at Wright Air Field in Dayton, Ohio, the U.S. Army Air Corps held a flight competition for airplane manufacturers vying to build its next-generation long-range bomber. It wasn't supposed to be much of a competition. In early evaluations, the Boeing Corporation's gleaming aluminum-alloy Model 299 had trounced the designs of Martin and Douglas. Boeing's plane could carry five times as many bombs as the Army had requested; it could fly faster than previous bombers, and almost twice as far.
>
> "A Seattle newspaperman who had glimpsed the plane called it the 'Flying Fortress,' and the name stuck. The flight 'competition,' according to the military historian Phillip Meilinger, was regarded as a mere formality. The Army planned to order at least 65 of the aircraft. A small crowd of Army brass and manufacturing executives watched as the Model 299 test plane taxied onto the runway. It was sleek and impressive, with a 103-foot wingspan and four engines jutting out from the wings, rather than the usual two. The plane roared down the tarmac, lifted off smoothly and climbed sharply to 300 feet. Then it stalled, turned on one wing and crashed in a fiery explosion. Two of the five crew members died, including the pilot, Major Ployer P. Hill (thus Hill AFB, Ogden, UT).
>
> "An investigation revealed that nothing mechanical had gone wrong. The crash had been due to 'pilot error,' the report said. Substantially more complex than previous aircraft, the new plane required the pilot to attend to the four engines, a retractable landing gear, new wing flaps, electric trim tabs that needed adjustment to maintain con-

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Understanding the True Value of the Occupational Health Product

FRANK H. LEONE, MBA, MPH

Your clinic needs to sell occupational health services based on their perceived value to the buyer. Hence, you must learn to assess each buyer's perception of what constitutes value to them *before* discussing your services.

Traditionally, such an assessment is done through the use of astute questioning (e.g., "What is most important to you in selecting an external provider of occupational health services?"). Once you have an understanding of what motivates the prospective buyer, only then can you position your "product(s)" in the most appropriate manner.

Here, we present 10 common measures of value. Some may stand on their own, while others more often offer value in combination with one or more other measures.

1. The core equation. This is the starting point for most clinics: "If our intervention(s) can lower your injury/illness incidence and/or decrease the lost work time when such incidence occurs, your company will save money." Logical, true, and often (but not always) understood by the buyer. Nonetheless, the salesperson should always float this concept out to the prospect in order to determine if the prospect embraces this concept, or is likely to embrace it given additional information.

2. Incidence prevention. Many buyers warm to the argument that a strong incident reduction program can, in turn, markedly reduce unnecessary healthcare costs. Logic again reigns supreme: prevent the injury or illness and you eliminate the workers' compensation expense. Strongly credentialed staff and workplace walkthrough programs are typical selling points to address this value need.

Frank Leone is president and CEO of RYAN Associates and executive director of the National Association of Occupational Health Professionals. Mr. Leone is the author of numerous sales and marketing texts and periodicals, and has considerable experience training medical professionals on sales and marketing techniques. E-mail him at *fleone@naohp.com*.

3. Making the buyer look good. In many cases, the buyer's parochial interest wins out. For every buyer that has a "company first" conception of value, there is a buyer that has a "what's in it for me" point of view. Once you determine if your prospect is of "me first" or "all about our company" vintage, you position your appeal accordingly.

4. Convenience. Never underestimate convenience as a powerful buying motive. There are simply vast numbers of buyers who are perfectly satisfied to be working with a clinic that is nearby, offers appropriate hours, and is easy to deal with. Never mind that their clinic of choice may not offer optimal outcomes or systematic management of their workplace health; easy is better. Keep some convenience cards in your portfolio and play them whenever you detect the convenience cue.

5. Communication. For every buyer that touts convenience, another touts communication. These buyers want the personal touch and "true" relationships, and are less likely to be swayed by such technical concepts as outcomes. The effective salesperson needs to emphasize their program's communication skills whenever the communications issue comes up.

6. Price (return on investment). Price-conscience buyers are certainly out there; in fact, they are out there in droves. Such buyers tend to view occupational health as a series of discrete commodities, and lean toward the lowest price option for most of their purchases.

Often (but not always), a salesperson has no recourse when it come to price. The recourse lays in return on investment.

In many cases, the "price trumps all" buyer is likely to respond to the return on investment argument; after all, they do tend to look at the world in terms of dollars and cents. Accordingly, the salesperson must come prepared to trump

Continued on page 35

the price objection with a strong return-on-investment argument.

7. Personal accessibility. Many focus group participants have told me that access to a broad array of professionals holds considerable value to them. This is clearly a value best offered by a health system, large hospital, or multi-specialty group. Occupational health often does serve as the access portal to a large healthcare system, thus providing the buyer with a sense of comfort.

Personal accessibility is a card that should be played if available and when appropriate.

8. Comfort. Okay, be honest! How often have you bought something—trivial or significant—primarily because you simply liked (i.e., felt comfortable with) the salesperson. Merits of the product be damned—you just did not want to disappoint the salesperson.

Thus, a salesperson should maintain a keen antenna for those prospects that seem to offer instant chemistry and emphasize the personal relationship when negotiating with such individuals.

9. Continuity of care. Many prospective buyers recognize the inherent value of receiving a tightly knit continuum of occupational healthcare. But not *every* sales prospect is likely to see the inherent value of this attribute. The notion of continuity of care should be part of every sales discussion and used as a value-added feature when it becomes clear that the prospect does recognize its value.

10. Certifications. Many potential buyers are certification wonks; they are unduly impressed by certified credentials and (conversely) uncomfortable with programs that lack such certified personnel. The astute sales professional should have mastery of the certifications and levels/training of key program personnel and be able to articulate the value of each certification.

In Summary

Recognize that the value of the occupational health product may mean different things to different people. All 10 of the values discussed here can be the primary value to a given buyer (and, often, the buyer's perception of value is a combination of two or even more of these values).

Always ask probing questions in order to ferret out the existence and magnitude of each potential value in the buyer's eye.

Develop a cogent reason why your clinic offers particular value in each of the 10 areas, and be prepared to support these values as appropriate. ■

Q. An urgent care physician whose claims I process attended a seminar in Michigan where you lectured. The physician believes that you said that there is a code for a slit lamp exam when there is no foreign body removal.

I have investigated this situation and the consistent answer I am getting is that if there is not a foreign body removal, then the slit lamp exam is not separately billable from the E/M code.

What is your understanding of this subject?

– *Question submitted by Theresa Krynski, Accurate Billing Service, Warren, MI*

A. You are correct. I am not sure what he understood, but it might relate to one of the following two facts:

1. When the doctor performs an eye exam, you may consider using the ophthalmology E/M codes (92002, 92004, 92012, 92014). Some payors may deny payment with the reasoning that only an ophthalmologist may use these codes. Neither CMS nor the AMA, however, restricts these codes to services provided by ophthalmologists. With good documentation of the level of exam and a clear understanding of the code definitions, you are likely to win an appeal. Per your contract with any specific payor, however, the payor may retain the right to restrict codes to specific specialties.
2. In addition, if you code using 99201-99215, you get credit for additional elements in the CMS 1997 E/M guidelines (eye algorithm) when you use a slit lamp.

Q. This question is directly related to a question that was printed in the July/August 2010 issue of *JUCM*. In regard to coding and billing for splints, you stated that it is appropriate to bill Q4022 [or other appropriate supply code] for splint supplies. I would like to know if it is appropriate for us to bill that code, as we also use molded fiberglass splints. We are hospital-based and the physicians are employed. Thus, we split bill our claims. I have been told that Q4022 is not appropriate for facility billing [UB-04]. However, is it appropriate to bill it on the professional side [CMS-1500]?

– *Question submitted by Marie Garcia, Casa Grande Regional Medical Center Urgent Care, Casa Grande, AZ*

A. If your hospital has chosen to split bill the urgent care visits, then the supplies are not billed on the CMS-1500, as the CMS-1500 is used (in the case of split billing) only for professional services (not supplies). As a general rule, you should code all applicable HCPCS codes on the UB-04. However, per the Medicare Claims Processing Manual (*http://www.cms.gov/manuals/downloads/clm104c04.pdf*):

"When medical and surgical supplies (other than prosthetic and orthotic devices as described in the Medicare

Continued on page 36

CODING Q & A

Claims Processing Manual, Chapter 20, §10.1) described by HCPCS codes with status indicators other than 'H' or 'N' are provided incident to a HCPCS codes with status indicators other than 'H' or 'N' are provided incident to a physician's service by a hospital outpatient department, the HCPCS codes for these items should not be reported because these items represent supplies."

Q4022 is a code with a Status Indicator of "B" (Codes not recognized under OPPS—Outpatient Prospective Payment System), so you do not report this code (or other splint supply Q codes) on the UB-04. ■

HEALTH LAW

trol at different airspeeds, and constant-speed propellers whose pitch had to be regulated with hydraulic controls, among other features.

"While doing all this, Hill had forgotten to release a new locking mechanism on the elevator and rudder controls. The Boeing model was deemed, as a newspaper put it, 'too much airplane for one man to fly.' The Army Air Corps declared Douglas's smaller design the winner. Boeing nearly went bankrupt. Still, the Army purchased a few aircraft from Boeing as test planes, and some insiders remained convinced that the aircraft was flyable. So a group of test pilots got together and considered what to do.

"They could have required Model 299 pilots to undergo more training. But it was hard to imagine having more experience and expertise than Major Hill, who had been the U.S. Army Air Corps' Chief of Flight Testing. Instead, they came up with an ingeniously simple approach: they created a pilot's checklist, with step-by-step checks for takeoff, flight, landing, and taxiing. Its mere existence indicated how far aeronautics had advanced.

"In the early years of flight, getting an aircraft into the air might have been nerve-racking, but it was hardly complex. Using a checklist for takeoff would no more have occurred to a pilot than to a driver backing a car out of the garage. But this new plane was too complicated to be left to the memory of any pilot, however expert.

"With the checklist in hand, the pilots went on to fly the Model 299 a total of 18 million miles without one accident. The Army ultimately ordered almost 13,000 thousand of the aircraft, which it dubbed the B-17. And, because flying the behemoth was now possible, the Army gained a decisive air advantage in the Second World War, which enabled its devastating bombing campaign across Nazi Germany."

In the 1970s, philosophers Samuel Gorovitz and Alasdair MacIntyre wrote an essay on human fallibility, titled Toward a Theory of Medical Fallibility. In it, they attempt to answer why humans fail at certain endeavors. They broke down the reasons to one of three root causes:

1. Necessary fallibility. We attempt to do something that is simply beyond our capabilities despite all the tools we possess. If we take out the things we should not even be attempting (necessary fallibility) there are two other reason why we fail in areas in which we do have the ability to be successful.
2. Ignorance. We fail because we do not yet have a complete understanding of everything we need to know to be successful.
3. Ineptitude. We have the knowledge; we simply fail to apply it correctly.

Over the last century, humans have made great strides to conquer ignorance. As a species, we know more about ourselves and our surroundings than ever before.

Where we still have challenges, though, is ineptitude. Odd as it sounds, our *lack of ignorance* may even contribute to our ineptitude. For example, in the old days (1960s), treating a patient with a heart attack simply meant putting them in the hospital, giving them oxygen, morphine for pain, and placing them on strict bed rest for two or three weeks.

Contrast today where patients I admit with an acute myocardial infarction get multiple drugs, are in the cath lab in less than 90 minutes, and are typically home the next day or, at most, the day after. There is simply so much more to know than there used to be, yet a provider cannot simply "plead ignorance" inasmuch as the information, thanks to Google, etc. is often just a few clicks or a phone call away.

When providers fail, it is often because of ineptitude; we miss the diagnosis, we cause an iatrogenic injury, we prescribe the wrong drug or dose or combination of medicines, we don't document appropriately.

With all of our training and knowledge, how is this possible? How are we forgetting to latch the proverbial door?

For all of you who have worked in a busy urgent care center, the answer is obvious: the volume and complexity of information necessary to practice safely is nearly beyond our ability to interpret, synthesize, and react to it in a timely fashion.

In short, the depth of our knowledge has become both a blessing and a burden.

In the next issue, I will discuss how we can reduce the likelihood of errors due to ineptitude. If you are like me and can't wait until next month, the answer is: The Check List. ■

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MEDICAL DIRECTOR - Nashville: Medical Directorship position with a new company looking to develop and manage urgent care centers initially in Nashville, Tennessee and then to expand to other markets. Preferred candidate will be board certified in family medicine, emergency medicine, med/ped or internal medicine and with significant urgent care/management experience. An entrepreneurial inclination is desired as the company hopes to grow rapidly providing future leadership/corporate advancement.The goal is to open the first center in late 2010 so respond quickly. Staff level physician openings available as well. Compensation will be on an hourly rate based on experience along with comprehensive benefits. Contact Nancy Agee at: 800-678-7858 ext. 64455; nagee@cejkasearch.com or visit www.cejkasearch.com. ID#135784C14.

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Email: Recruitment@EMAonline.com

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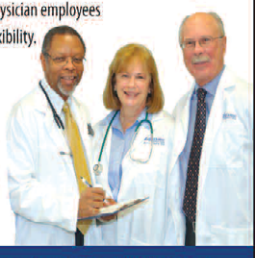

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Next available issue is November, closing September 30th.

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For more information contact: Kay Kernaghan
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kkernagh@phs.org
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Please Contact or send CV to:
Emily Yezek, OSF Physician Recruitment
309-683-7274 or 800-232-3129, press 8
Fax: 309-683-8353

Email: emily.a.yezek@osfhealthcare.org
Web: www.osfhealthcare.org

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Milwaukee, Wisconsin

Urgent Care Clinic Physician Assistant

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1032 S. Cesar E. Chavez Dr., Milwaukee, WI 53204

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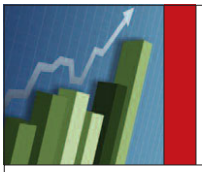


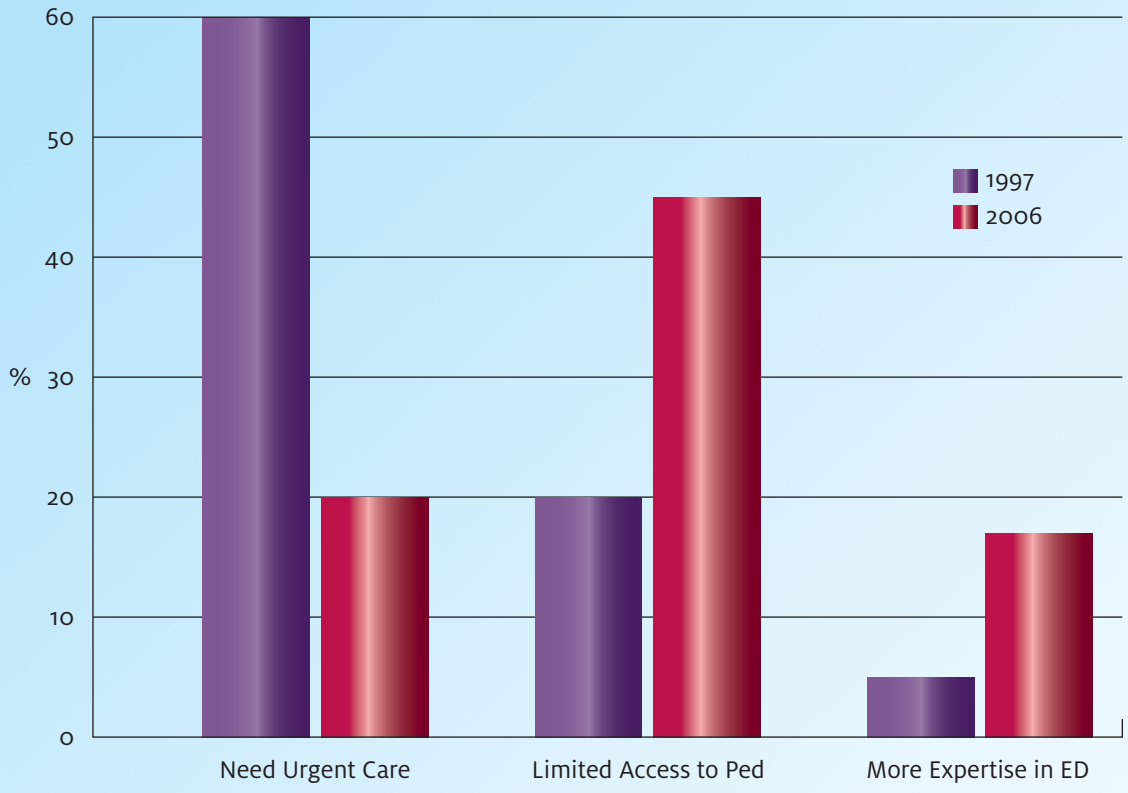
DEVELOPING DATA

In each issue on this page, we report on research from or relevant to the emerging urgent care marketplace. This month, we present data that shed light on reasons parents may be taking their children to the emergency room instead of to their pediatricians, even for non-urgent care.

Researchers at Columbia University Medical Center in New York City report that between 1997 and 2006, there's been a shift in those reasons; where perceived need for immediate care used to be the most likely reason, today's most prevalent rationale is perceived limited access to the pediatrician. More parents in 2006 also reported that they think clinicians in the ED have more expertise than those in the pediatrician's office.

Interestingly, the percentage of uninsured children has remained essentially unchanged (roughly 5%, according to the researchers).

REASONS PARENTS CHOOSE THE ED OVER THE PEDIATRICIAN'S OFFICE



Source: Columbia University Medical Center. Parents increasingly choose ER over pediatrician for children's non-urgent care. July 26, 2010. Available at *http://cumc.columbia.edu*.

Clearly, the data indicate that many parents are not fully satisfied with the care their children are getting in the pediatrician's office. Might those parents be inclined to take them to an urgent care center, where they're likely to spend less time and money, next time?

Perhaps more to the point, are your marketing message and initiatives reaching them so they can make an informed choice?

If you are aware of new data that you've found useful in your practice, let us know via e-mail to *editor@jucm.com*. We'll share your discovery with your colleagues in an upcoming issue of *JUCM*.

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