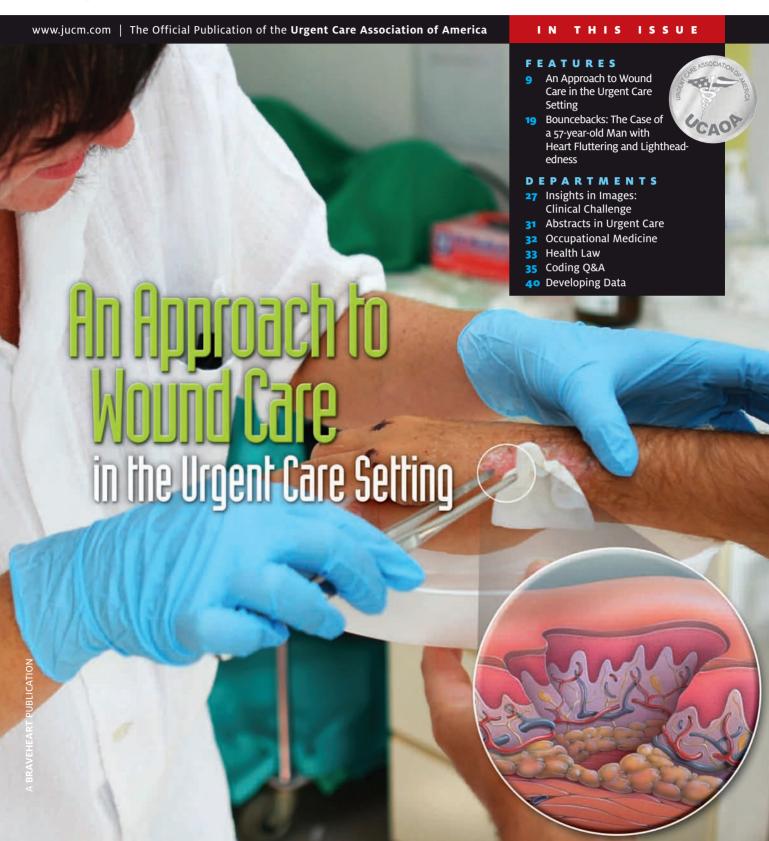
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LETTER FROM THE EDITOR-IN-CHIEF

Are You Really Listening?

We all think we are great listeners. We "listen" to chief complaints, we listen to histories of present illness, we listen to heart and lung sounds. We spend the better part of every day "listening."

But are we really listening? Or are we just "hearing?" Hearing is the perception of sounds by the auditory nerves in the ear. Listening involves an attentiveness to hear with a purpose of understanding. Hearing is a temporal lobe function, while listening activates the frontal lobe, and it is this frontal lobe activity that generates "meaning" and "understanding" from sounds.

Well, since the goal of every patient encounter is to generate meaning and understanding from words and sounds, it stands to reason that we should be devoted to being the best "listeners" we can be.

But what does that mean? Can we learn to be better listeners? How can better listening improve patient outcomes? Can better listening improve efficiency and productivity?

Good listeners are almost universally skilled at "active listening." Active listening involves an intentional focus with the purpose of understanding the person you are listening to. In medicine, understanding your patient is the single most important contributor to an effective history, and an effective history is, of course, the key to accurate diagnosis. Additionally, understanding is necessary for efficient processing of information and, therefore, contributes to more efficient encounters.

Here are some things you can do to be a more active listener:

- Be attentive! Easier said than done. Our offices are filled with distractions. In order to be attentive, you must stop all non-relevant activities and orient yourself to the encounter. Turn off your cell-phone. Review relevant material and organize your thoughts before entering the room.
- *Do not* pre-judge! Judgments will prejudice the listener and subvert the direction and content of the history. You will hear what you expect to hear when you pre-judge.
- Wait until the end of the encounter to offer opinions. You are there to hear what your patient has to say, not the other way around. Patients often ask your opinion about something before they have told their whole story. Resist the urge. Encourage them to tell you more. It reassures the patient that you really want to get it right.
- Be physically directed toward the patient. Things like eye

- contact and leaning forward while listening show your patient you are interested
- Be responsive. Show appreciation for what the patient is telling you. This builds trust and encourages openness.
- Re-state and summarize. This is perhaps the most important step in history-taking. This ensures you understood correctly and demonstrates significant engagement. Often, the patient will give a disjointed history or timeline. We can help our patients organize their histories, but we must make sure that it represents the real story, not simply our interpretation.
- If you are unclear, ask open-ended, respectful questions. Statements like, "To be sure I am clear..." or "Can you tell me a little more about..." are disarming ways to get the information you need without insulting your patient's ability to communicate.
- Be empathetic. Even when you don't feel like it. You will be amazed at how far a little empathy goes.

Make a commitment to understanding the feelings behind the facts. Patient histories are not merely a collection of signs and symptoms. The patient's emotional and interpretive response is critical to understanding the context of their experience. In order to offer the best solution, you must address the way your patient is experiencing their problem.

Active listening *can* be learned, but it does take practice. You've got to try it out, and it may feel awkward or forced at first. However, even the most feeble attempts tend to generate positive results and, with time, you will grow more confident. The rewards are obvious:

- more efficient encounters
- better outcomes
- higher patient satisfaction
- higher job satisfaction.

Four worthy goals indeed! ■

Lemit, no

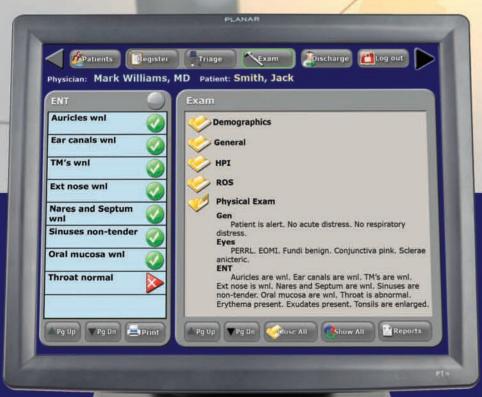
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March 2010

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CLINICAL

9 An Approach to Wound Care in the Urgent Care Setting

When the body's first line of defense against impurities (i.e., the skin) is breached, immediate care is imperative. Sometimes, however, the challenge is reining in the instinct to over-treat a wound.

By Michael S. Miller, DO, FACOS, FAPWCA, CWS, and Eric Newgent, DO, MS

BOUNCEBACKS

19 The Case of a 57-year-old Man with Heart Fluttering and Lightheadedness

Physicians are highly trained in the healing arts. Most patients are not. Why, then, can it sometimes be a challenge to look beyond the patient's self-diagnosis to uncover the actual cause of symptoms?

By Jill C. Miller, MD and Michael B. Weinstock, MD



It's likely that you will be presented with a female patient who has concerns related to vaginal bleeding at some point. In addition to assessing the patient from a hemodynamic standpoint, could you confidently evaluate potential causes in order to initiate appropriate treatment or referral?



WEB EXCLUSIVE

Case Report: A 9-year-old Boy with Respiratory Symptoms

A diagnosis has been made and treatment begun, but the patient's symptoms have only worsened. Will a pair of fresh eyes in the urgent care center help this family get to the root of their son's breathing difficulties? Available only at www.jucm.com.

By Joseph Toscano, MD

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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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or its distinction of being the body's largest organ and its critically important function of shielding our delicate innards from all manner of contaminants, the human skin is seldom given a thought by patients (outside of cosmetic concerns).

That is, until it's compromised.

Clinicians, of course, probably give it more heed but may be inclined to overlook the skin's remarkable ability to heal itself. The trick is knowing how to promote that ability without interfering with it.

In An Approach to Wound Care in the Urgent Care Setting

(page 9), Michael S. Miller, DO, FACOS, FAPWCA, CWS and Eric Newgent, DO, MS review the general principles of managing com-





mon (and not so common) wounds, with particular emphasis on cleaning and dressing, along with knowing when to refer the patient to a wound specialist.

Dr. Miller is the founder and medical director of The Wound Healing Centers of Indiana in Bedford and Indianapolis, IN.He is also clinical consultant for several domestic and international wound care companies, and has written numerous articles—including one on Evaluation and Management of Lower Extremity Edema for the March 2009 issue of IUCM—and book chapters on topics related to chronic wounds and wound healing.

After serving as medical director of emergency medicine and



urgent care for many years, Dr. Newgent is now a medical director of occupational and sleep medicine in Reedsburg, WI.



In a new installment of the Bouncebacks series, Jill C. Miller, MD and Michael B. Weinstock, MD delve into the critical question of when the power of positive thinking may clash with clinical judgment. More specifically, The Case of a 57-year-old

Man with Heart Fluttering and Lightheadedness (page 19) centers on the patient's desire for a relatively minor cause for his symptoms and the dangers of the clinician being dissuaded from considering more dire etiologies.

Certainly no one hopes more fervently for a benign diagnosis than parents bringing a child in for assessment. Joseph Toscano, MD relays the case of a pediatric patient with worsening symptoms



in Case Report: A 9-year-old Boy with Respiratory Symptoms, available exclusively at www.jucm.com.

Dr. Toscano practices at San Ramon Regional Medical Center and the Palo Alto Medical Foundation, both in California. He is also a member of the JUCM Editorial Board, as well as a past contributor to the journal.

Also in this issue:

Nahum Kovalski, BSc, MDCM reviews new abstracts on copayments for ambulatory care, errors related to pediatric deaths and bacterial infection, and the effects of pneumococcal conjugate vaccine on incidence of empyema.

Frank Leone, MBA, MPH casts the expression "it depends" in a whole new light, applying it as a decision point in staking out market position.

John Shufeldt, MD, JD, MBA, FACEP makes a compelling case for use of evidence-based care paths in urgent care.

David Stern, MD, CPC answers reader questions about consult codes, injection codes, and coding for diabetes education and in-house dispensing.

JUCM is actively seeking new authors to address a host of clinical topics. If you'd like to hear what they are, or if you have an idea of your own, e-mail Lee A. Resnick, MD, JUCM's editorin-chief, at editor@jucm.com. ■

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

Manuscripts on clinical or practice management topics should be 2,600-3,200 words in length, plus tables, figures, pictures, and references. Articles that are longer than this will, in most cases, need to be cut during editing.

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

Before submitting, we recommend reading "Instructions for Authors," available at www.jucm.com.

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FROM THE EXECUTIVE DIRECTOR

Demand, Development, and Data

■LOU ELLEN HORWITZ, MA

As of this writing, there is a fury being unleashed by patients in a mid-Atlantic state over the relocation of a single urgent care center. A growing contingent of community leaders and patients has started a mass revolt—including a blogging, e-mailing, and phone calling campaign.

There are a lot of possible takeaways from this.

First, there's a ready-made market in that area if you are looking for a spot for your next location!

Second, patients clearly have strong feelings about availability of urgent care.

Third, if you are considering a relocation, be sure that you are handling it sensitively or you could have a media nightmare on your hands instead of a grand re-opening.

Fourth, choosing your initial location carefully is still one of the most important considerations in the business.

There's getting to be less available ground, too; according to our tracking of centers, there are 636 (give or take a few) more urgent care centers in the U.S. than there were in early 2008. That's about 7.7% growth in two years—split almost evenly across 2008 and 2009.

By contrast, retail clinics grew by about 350% in 2007, 30% in 2008, and by a total of 10 centers in 2009. There are prevailing theories that retail health growth for the future will be in the "worksite clinic" arena, and another bubble is predicted for 2012-2015.

While urgent care is clearly the tortoise in this "race," to me that still seems like a pretty good thing to be. And, happily, while 8,874 is a lot of urgent care centers, the United States is still a big place and there is plenty of room to continue to grow.

As most everyone knows, our baseline number of urgent care centers was garnered during the development of the "sampling frame" for the first truly national-level urgent care benchmarking survey that UCAOA funded in 2008. Since



Lou Ellen Horwitz is executive director of the Urgent Care Association of America. She may be contacted at *Ihorwitz@ucaoa.org*.

those results were published, we've gotten hundreds of requests for additional pieces of data. This feedback, coupled with our promise for new data every two years, means it's time to do it again.

"The best-written survey in the world is ultimately worth nothing without quality responses."

The UCAOA Benchmarking Committee has been working very hard for the past six months developing the upcoming 2010 urgent care survey. We will be repeating some questions that we want to track longitudinally, but introducing many new ones in the areas you told us were most important to you: staffing, financing, clinical services, and marketing.

We've continued to learn a lot internally about writing good survey questions that will elicit specific information to help you and the industry be even more successful, but the *key* to the survey's success is *you*. If you receive a survey, it is vital that you complete it thoroughly and accurately. The best-written survey in the world is ultimately worth nothing without quality responses.

We've also made some process adjustments to make those responses easier for you to share. Instead of paper, we'll be using a web-based technology.

We are still using an external survey administrator to ensure the validity and credibility of the results. By using our selected vendor and their robust reporting technology, we will be able to do even better cross-tabulation-style analysis and report the results more quickly than we could in 2008.

We are forever indebted to Robin Weinick, PhD and her team at the Harvard School of Public Policy for their original work on the inaugural survey. It established a valid baseline for the industry and provided a strong foundation for us to be able to take the survey soundly into its next evolution—which you will see very, very soon.

P.S.: The owner of the mid-Atlantic urgent care center has since announced a reversal of their relocation decision.



Regarding Our November Issue

To the Editor:

As usual, your journal is up to date and pertinent to the world of urgent care. However, I would like to make a couple of comments on Dr Toscano's article (Treating Common Upper Respiratory Tract Infections in an Era of Increasing Antibiotic Resistance, Joseph Toscano, MD, JUCM, November 2009).

When discussing the treatment of the common cold, etc., he mentions that cough medications are usually compared with placebo during studies, and that we don't have access to placebos. However, I've read several recent articles that mention that, teaspoon-for-teaspoon, honey works as well as OTC cough suppressants (only to be used in children >1 year of age). Honey, it seems to me, is just a liquid "sugar pill." And, since my grandmother always "recommended" I try whiskey and honey when I was younger and had a bad cough, you know it must work!

Second, at the end of the article, when Dr. Toscano mentions the "safety-net" prescriptions, he quotes a review that suggests that no antibiotic at all gives as good or better outcomes. I think Dr Toscano fails to address here the unique roll that we, as urgent care physicians, perform.

Since we are not, ideally, anybody's "regular" doctor, my practice strongly discourages telephone medicine. Primary care doctors may be able to discharge the patient with only symptomatic treatment and let them call back later if not improving. We don't do so. If the patient fails to improve after the usual four to five days (or whatever you tell them), they tend to get upset when they call back and are informed they must see a physician to get a script for antibiotics.

John White, MD

The Jackson Clinic, P. A. lackson. TN

Dr. Toscano responds: I love honey! Great idea—all the better if it helps symptoms! As far as safety-net prescriptions, I tried to cite evidence supporting an approach that includes either giving a safety-net prescription or not giving one, based on the variety of customer-service, patient preference, follow-up, and risk-benefit issues we all have to deal with every day. Either approach seems to result in equivalent outcomes and to reduce antibiotic use compared with recommending all of these patients begin antibiotics immediately.

If you have thoughts on an article that appeared in JUCM, The Journal of Urgent Care Medicine (or on issues relevant to urgent care in general), please express them in a Letter to the Editor via e-mail to editor@jucm.com or by "snail mail" to: Editor, JUCM, 65 North Franklin Turnpike, Second Floor, Ramsey NJ 07446.

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Clinical

An Approach to Wound Care in the Urgent Care Setting

Urgent message: Understanding the body's natural ability to heal itself and factors that diminish that ability—is of great clinical value and can help you determine whether a wound is acute or chronic, and inform the decision to clean and dress or refer to a wound specialist.

Michael S. Miller, DO, FACOS, FAPWCA, CWS and Eric Newgent, DO, MS

Introduction

The skin is the largest organ in the human body. In simplest terms, its primary function is to protect the delicate insides from the harsh external environment. Injury to (or a defect in) the skin is not a cause for alarm in most cases, as this particular organ has a remarkable ability to regenerate itself.

The goal of treatment is to maximize the healing potential of the skin and to create a "neoskin" to recreate the protective function until the original tissue has healed.

Equally important is to employ techniques, products, and activities that promote healing as opposed to inhibiting it. Unfortunately, many of those activities commonly performed in the name of "wound healing promoting" are in fact "wound healing inhibiting."

This review will familiarize practitioners in the urgent care setting with the general principles of managing common and less common wounds and describe common pitfalls, with an emphasis on cleaning and dressing of wounds appropriate for treatment there. Repair of specific wound types is beyond the scope of this article and will be addressed in a future issue of IUCM.

Definitions

Let's start with some simple definitions. Generally, wounds can be divided into two major categories: acute and chronic.

Acute wounds are those likely to be seen more often in the urgent care setting and include lacerations,

abrasions, burns, and skin/tissue avulsions. Acute wounds go through the normal phases of wound healing:

- 1. inflammation
- 2. proliferation (also called *granulation*)
- 3. epithelialization
- 4. maturation

An acute wound can be expected to heal usually within seven to 14 days, depending on the size, depth, etc.

Figure 1.



Third-degree burns to the lower back of a paraplegic inflicted by an electric heating pad.

Unfortunately, there are wounds that for any number of reasons fail to advance past the inflammation phase. Any wound that fails to show progress in about three to four weeks can be considered *chronic*.

This is not a hard and fast rule, however, as occasionally a wound may take that long to heal. For the purposes of simple categorization, though, this period is considered a reasonable standard.

The reason for this differentiation is that while the evaluations of these two types overlap, the treatments often differ significantly. A wound may fail to progress (or become chronic) for a variety of reasons (one quick tidbit, however: the reason is rarely infection).

General Management

Clearly, a good history of the wound is essential; how it occurred, previous occurrences, related conditions, timing and longevity, and previous treatments are all important basics.

All wounds should have a through assessment, including evaluation of the integrity of the neurovascular bundles and tendons in proximity.

Special attention should be paid—and documented—to ensure that no fracture, joint violation, or foreign body exists.

Documentation of the length (usually the longest linear dimension), width (the longest linear dimension that is perpendicular to the length), and the depth (taken at a right angle to the skin edge) is important. Photodocumentation is strongly recommended, though many facilities do not have the capability for storage of such pictures.

With respect to the defining characteristics of acute versus chronic wounds, any wound greater than 12-hours-old should be evaluated for signs of infection. (Remember, however, that the signs of infection and inflammation related to healing—red, hot, swollen and tender—are identical. Remember, also, that just as we

do not treat acutely sprained ankles with antibiotics, a knee-jerk antibiotic prescription is to be avoided.)

All wounds—both acute and chronic—should be cleansed if contaminated, and covered to prevent further contamination.

Identifying tetanus vaccination status is mandatory. All wounds need to be kept moist so cells can migrate across the surface of the wound to heal. There is significant evidence that moist wounds heal faster than those exposed to the environment. "Letting the air get to it" is an old wives' tale that has no basis in science.

Wounds and Burns

The approaches to open wounds and to burns are similar in that both injuries represent a disruption in skin integrity.

In a burn injury, be it thermal or chemical, your concern should be that the damage extends below the skin into the deeper tissues.

For thermal injuries, the application of ice or very cold dressings should be scrupulously avoided, as the addition of these to already injured tissues will only increase the amount and depth of the damage. *Cool* dressings should be applied gently and in a manner that allows them to be removed without causing trauma through adherence to

the skin and tissues.

For chemical injuries, the appropriate diluent should be generously applied (a mnemonic rhyme that may be helpful: The solution to pollution is dilution), then the area covered with an easily applied, non-adherent dressing.

There are now numerous antimicrobial dressings that have been shown to reduce the risk of subsequent infection. The old standard—silver-impregnated creams—cause considerable pain with application and removal, and make evaluating the status of the wound difficult.

Instead, opt for one of the numerous modern dressings that use silver, iodine, honey, and other constituents that far surpass the "standard" regimens by decreasing pain, improving patient compliance, and, potentially, increase the rapidity of healing. The patient should be advised that more specialized dressings can be more expensive, with the cost balanced by the above factors.

Wound Preparation

The purpose of irrigating a wound is to remove contam-

ination without killing off the body's own defensive cells. Irrigation both dilutes and washes away bacteria and particles.

The choice of irrigating fluids is critical, since many chemical are toxic to white blood cells and new epidermal cells. A good rule of thumb is that a fluid is safe to use on a wound if you are willing to put it in your own eye.

As with any treatment, it is important to know the potential risks and benefits. Commonly used substances such as betadine, chlorhexidine, alcohol, Dakin's solution, and peroxide actually have a toxic effect on wound healing and have the potential to cause more harm than good. Simple, plain, unsophisticated normal saline still holds the position as the standard irrigation for wounds, based on its long history of success and its minimal effect on the wound.

There are multiple articles relating to the amount of force needed to cleanse a wound. The goal is to rid the wound of foreign matter adequately without damaging the delicate and already injured (and, therefore, more sus-

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ceptible to additional injury) tissue; simply pouring saline onto a wound creates about 4 pounds per square inch (psi) of pressure, whereas irrigating the wound using a 30 cc syringe with an 18 g catheter creates about 15 psi.

While this is the standard regimen and pressure for cleaning a wound, other factors such as the type and amount of foreign matter, the adherence, and patient's tolerance to the irrigation are all mitigating factors in choosing which method of irrigation is best.

Debridement

The purpose of debridement is to remove all tissue that is non-viable and that will inhibit wound healing and promote infection. For the sake of this article, debridement is defined as the use of a scalpel blade, sharp curette, or scissor.

In an acute wound, the dilemma is that the effects of the injury may have not fully manifested; tissue that looks viable may not, in fact, survive and vice-versa. In this case, applying a protective dressing and reevaluating the wound at 24 hours may be sufficient to allow a line of demarcation to develop between viable and non-viable tissues.

In a chronic wound in which the healing process has been arrested, debridement provides a means to convert a chronic wound into an acute wound to restart the healing process.

The question of how much to debride in urgent care is often limited by a patient's tolerance to pain and the ability to provide hemostasis. Liberal use of local anesthetic is advised; however, there is a risk of further damage to fragile tissue via vascular compromise through the amount of anesthetic used, and depending on whether or not epinephrine is used.

When in doubt, defer on debridement and refer the patient to a wound care specialist or surgeon. This is especially advisable in patients with diabetes, arterial insufficiency, vasculitis, immunocompromised states, and those with a history of difficulty healing previous wounds.

Dressing Choices

The purpose of dressings is to provide an optimum environment for the wound to heal and to protect the wound until healing is completed. There are a wide variety of dressings; however, it is unlikely that the typical urgent care facility will have more than a few standard types.

Be careful not to use ointments that have neomycin as an ingredient, since a large number of patients can become sensitized and allergic.

One controversy involves the use of a sterile versus clean dressings. In an acute wound, there is general consensus that a sterile dressing is preferable to reduce the risk of infection. In contrast, chronic wounds are most commonly treated with a clean dressing; interestingly, using clean technique for their care is considered standard.

This differentiation makes better sense when the relative risk of infection in both types is considered.

The question of whether to use a topical antimicrobial ointment versus a non-active dressing in acute wounds is a relatively low-risk decision. While there is evidence that use of a topical antimicrobial such as triple antibiotic ointment promotes rapid wound healing, the use of topical antimicrobials has been shown to increase the risk of skin sensitization and, of course, the (albeit low) risk of superinfection.

Homecare Instructions

As with any venture, keeping the wound care simple will reduce the potential for problems and complications.

All open wounds should be kept covered, in order to keep the wound moist. One of the basics of wound healing is that keeping the wound bed moist will promote cell migration. Further, the adjacent skin should be kept dry, as maceration increases the risk of damage to the healthy intact skin. This is underscored by the fact that most dressings have adhesive borders, and macerated skin can be easily damaged with the removal of these dressings.

The timing of a dressing change is based on several factors. Dressing changes of more than once a day can be expensive, time consuming, and increase the time of exposure of the wound to the environment. If the dressings is adherent, frequent dressing changes can also cause repeated trauma to delicate tissues.

On the other hand, a dressing with excessive drainage needs to be changed at an interval sufficient to reduce the risk of hygiene problems such as odor or soilage from the drainage. In this case, a more absorbent dressing may be beneficial.

Overall, a dressing change routine of every other day, when possible, seems to offer a good balance of all these issues.

Bathing Issues

In many cases, patients will be unwilling to alter their bathing routine to coincide with dressing changes, or the dressing choice is simply not compatible with exposure to water. As with any treatment, the goal is to improve overall compliance by minimizing intrusion into the patient's daily routine.

In most cases, the dressing choice can itself be a liquid-impervious substance such as a film, hydrogel sheet, or hydrocolloid.

In a situation where the patient's need or desire for bathing cannot be resolved by a dressing choice, there are numerous alternatives such as commercial rubber, latex, or plastic covers that are easily applied and removed.

When, because of wound location or other patient factors, the dressing (and wound) cannot be protected, then the next best choice is to simply keep the dressing on the wound as best as possible during the bathing activity. It is important to remember that the goal is to minimize further injury to the wound.

On that note, an important skill to develop is to remove a dressing while minimizing further damage to the wound and, equally important, minimizing additional injury to the adjacent skin. To do this, it may be helpful to consider the intent to be to remove the skin from the dressing and *not* to remove the dressing from the skin.

Simply pulling a dressing away from the skin means that there will be a traction force from the dressing on the skin. This causes the skin to extend, twist, and shear, thus assuring new skin damage at most, and considerable pain at least.

Potential for injury while removing a dressing can be minimized by following the steps detailed in **Table 1**.

Wound Healing in Compromised Patients

Healing is a complex process involving the entire physiology, but especially the immune system and circulation. Any compromise in this process can make healing suboptimal.

Unfortunately, there is very little that can be done to minimize skin

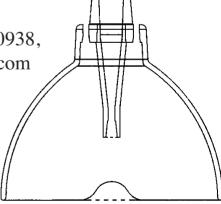
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used by emergency physicians more often for high-pressure wound irrigation than all other shields combined.

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Table 1. Low-risk Procedure for Removing Dressing

Trauma to even the most fragile skin will be minimized using this technique:

- 1. Elevate one edge of the dressing.
- 2. As you grasp the edge and start to elevate it, use a finger of the other hand to gently push the skin down, away from the dressing.
- 3. Once you have separation of the dressing and skin, the force of removing the dressing should be directed back over itself, as if to peel the dressing away on top of itself.
- 4. Simultaneously push the skin down and away from the dressing, while the dressing is gently and slowly peeled *tangentially* over itself in the same plane as the skin.
- 5. Of course, you will need to do repeated skin pushes as you peel the dressing away. *Do not ever elevate the dressing as you remove it*, but continue the tangential pulling.

damage overall. Moisturizing creams, vitamin E application, etc., have shown little effect on preventing skin trauma. In patients with "paper thin" skin from long-term medication use (e.g., steroids) or significant systemic diseases (chronic renal failure), the risk of open wounds from even the slightest trauma is high. The keys are to identify the most likely etiology and attempt prevention.

One factor all too often overlooked is the effect of medications on healing. The basis for healing is inflammation; thus, any medication that affects inflammation will affect healing. It is not enough to just recognize that patients on steroids or antineoplastic agents, among others, will heal more slowly. We must also be aware of *what* medications should not be used when evaluating and treating a patient with an open wound of any kind.

A prime example: NSAIDs for analgesia. If you remember that the "AI" in NSAIDs means "anti-inflammatory," then common sense should tell you that using this class of medications is counterproductive, and alternative analgesics should be considered.

Topical steroids should also be avoided in situations where an open wound needs to be healed.

Taking the extra time to understand the physiologic effects of many of the medicines we commonly use will help to minimize detrimental effects on what should be simple wound healing.

Skin Tears and Avulsions

Skin tears are common injuries in the elderly, especially on the upper extremity. Both aging and malnutrition may contribute to thin, fragile skin.

Skin tears are caused by shear forces separating the epidermis from the subcutaneous dermis. The epidermis is avascular; once it is separated from the subcutaneous layers, it will necrose and may inhibit wound healing. All too often, the edge of the skin tear has rolled under itself and, thus, there appears to be more open area of the wound than there actually is.

Whenever possible, skin tears should be evaluated by gently manipulating the edges of the tear using two saline moistened cotton tips (one in each hand). More often than not, you will find that the skin has rolled over onto itself and is adherent (similar to a taco shell folding over on itself). Using the cotton tip and gentle manipulation, you can usually tease the skin away from itself and expose the true

edge.

One key is that the edge is almost always ragged and irregular and not smooth. Only in the rarest of circumstances should the skin be debrided in such an injury; even when it is grossly torn or ragged, the edge can still be used to cover a portion of the open part of the tear. Simply maneuver the skin in a jigsaw puzzle fashion, when possible, to cover whatever area possible.

Epidermis is not usually suturable because of its fragility. In this case, steri strips can be used.

The technique here is to apply the steri strip from the flapped side and then gently manipulate the flap toward the other side. Care should be taken to not pull on the steri strip itself, as this may cause more tearing of the skin flap.

Once the flap is as approximated as can be obtained to the one side, then the other side of the steri strip should be sealed to the connecting side. Applying other steri strips at regular intervals along the flap in the same fashion will ultimately result in good skin tear reapproximation, with only the smallest defect left to epithelialize.

In flaps with little to no tension on approximation, the wound edges may be approximated with octyl cyanoacrylate.

There are unique silicone dressings with a natural adherence to epithelium that can be used to bolster, support, and immobilize skin tear edges to allow for healing.

Use of padded sleeves or leggings may help reduce injury to extremities from trauma and are used often in long-term care facilities.





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Friction/shear-based wounds on an elderly, bedridden patient.

While many non-institutionalized patients may balk at similar measures, it is important to have them recognize that the risk of an acute traumatic skin injury is much more painful and more potentially injurious than a padded cloth protective device.

Chronic Wounds

It is natural for wounds to go through the phases of healing delineated previously as they heal. However, for a variety of reasons (*rarely* infection), sometimes the wound fails to progress and the healing process is arrested

Although the length of time a wound has been present may give an indication that the wound is chronic, this is not necessarily a reliable indicator. The signs of a wound that has stopped the acute process are:

- no change in the dimensions
- an increase in the amount of fibrinous slough on the wound's surface
- no progression beyond the inflammatory phase. The goal of chronic wound management is to maximize the body's ability to heal the wound by identifying factors that have impeded its healing. Examples in-

clude, but are not limited to:

- managing blood sugars in diabetic
- restoring arterial circulation
- managing venous congestion
- offloading the wound itself
- improving nutrition
- eliminating medications that affect healing
- removing non-viable tissue.

Suffice it to say that the process of jump-starting a recalcitrant wound towards healing is always multifactorial.

In simplest terms, the goal is to convert a chronic wound into an acute wound so the healing process can be restarted.

When to Refer to a Wound Specialist

As with any other medical

dilemma we encounter, it is imperative that a rational, reasonable diagnosis be considered and the appropriate treatment instituted.

At the risk of redundancy, knee-jerk antibiotic prescribing should be avoided for obvious reasons.

The diagnostic consideration of a wound that is red, hot, swollen, and tender should be tempered with its longevity, location, associated medical conditions, and your own experience. Is this infection or chronic inflammation?

The decision as to when to treat in the urgent care center or refer to a wound specialist will be guided by the answers to a few basic questions, such as:

- How long has the wound been present?
- Has the wound improved at all since it developed?
- What treatments have been used to promote healing?
- What diagnoses have been rendered for the persistence of the wound?
- What work-up has been done thus far to evaluate the wound?
- What other constitutional signs/symptoms are present?

"Never put anything in a wound that you would not put into your own eye."

Has this condition been present previously and healed?

In simplest terms, consideration of these questions will guide you toward or away from a decision to refer to a specialist, as will your judgment of whether other issues may alter the potential for healing).

It is important to remember that definitive wound care education has been available only recently, and that it has not been limited to the surgical or dermatological specialties. Referral should be made to a practitioner with a definitive wound care background. The current practice of a four-hour per week shift in a wound care center does not a wound care specialist make.

Conclusion

With each break in the skin we encounter in urgent care, numerous questions must be answered. It should come as no surprise that the vast majority of the wounds we all see will heal *despite* our interventions of antibiotics, toxic, caustic dressings (e.g., Dakin's solution, betadine, peroxide), and antiquated treatments (again, "letting the air get to it" is not a good thing for open wounds; nor is bacon grease, alcohol, whirlpools or Epsom salt soaks, etc.).

One of the best tenets to remember, and one that bears repeating, is that you should never put anything in a wound that you would not put into your own eye.

Healing a wound is simple: maximize good things for the tissue and wound and minimize the detrimental and undetermined.

And when in doubt, get help. ■

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Bouncebacks

The Case of a 57-year-old Man with Heart Fluttering and Lightheadedness

In Bouncebacks, which appears periodically in JUCM, we provide the documentation of an actual patient encounter, discuss patient safety and risk management principles, and then reveal the patient's "bounceback" diagnosis.

Cases are adapted from the book Bouncebacks! Emergency Department Cases: ED Returns (2006, Anadem Publishing, www.anadem.com; also available at www.amazon.com and www.acep.org) by Michael B. Weinstock and Ryan Longstreth. The book includes 30 case presentations with risk management commentary by Gregory L. Henry, past president of The American College of Emergency Physicians, and discussions by other nationally recognized experts.

Jill C. Miller, MD and Michael B. Weinstock, MD

A 57-year-old Male with Heart **Fluttering and Lightheadedness**

hat happens when our patient so badly wants to be well that they talk us out of the correct diagnosis?

"I think it is my anxiety" was the mantra accepted by the physician in this case.

Though diagnoses are not always clear after the initial encounter, they are not up for negotiation. Patients have a vested interest, due to denial or human nature, in believing that nothing is seriously wrong with them. It can be tempting to accept the theory that is put in front of us, especially when the chief complaint is common and nonspecific; for example,

"I am lightheaded and my heart is beating fast."

Patients present to the urgent care center not only for a diagnosis, but also for reassurance. It is our job to stay neutral and perform a thorough evaluation, and to avoid the trap of tunnel vision with our dif-

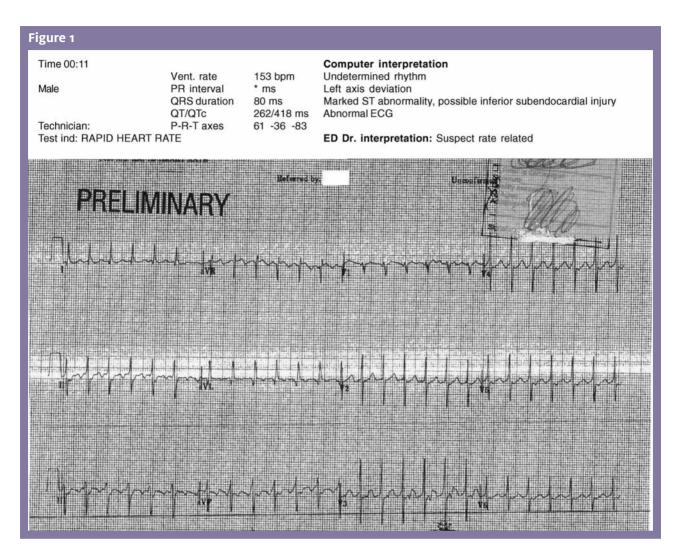
> ferential diagnosis and management. We must avoid being lulled into a false sense of security—especially when the patient does not want to be sick.

Initial Visit

(Note: The following, as well as subsequent visit summaries, is the actual documentation of the providers, including punctuation and spelling errors.)

CHIEF COMPLAINT: Heart Beat Rapid

Time	Temp (F)	Pulse	Resp	Syst	Diast	02	sat
Initial	98.3	147	20	176	127	99	
Repeat			114	16	133	68	97



HISTORY OF PRESENT ILLNESS:

Pt. states heart fluttering for 3 days, lightheaded with standing. Has intermittent chest pain which began gradually 3 days ago. The pain is mild with radiation to the left lateral ribs and upper arm. Has tingling left fingers. Hx of panic attacks, did not have any all summer but has been having increasing attacks that have been present the last 3 days with fluttering. No. previous hx of heart problems. Last summer with left upper arm pain, was eval. at another local hospital and had negative stress test done at that time. Denies syncope, peripheral edema, fever, sob, cough, diaphoresis, abd. pain, nausea. Hx of high triglycerides, no longer on meds for same. Had Hep. C. last summer, resolved. Has had anxiety and panic attacks. Pt is otherwise healthy, watches weight, works out regularly

PAST MEDICAL HISTORY/TRIAGE:

Allergies: NKDA

Current Meds: Unknown to patient

PSHx: Herniorrhaphy **PMHx:** HTN. Panic attacks

SHx: D/C ETOH 15 years ago after pancreatitis, pseudo-

cyst. Smokes 3 cigs per day for 15 years

FHx: Father with MI age 70, No hx of HTN, DM, DVT,

CVA

EXAM:

General: Well-appearing; Well nourished; A&O X3, in

Neck: No IVD or distended neck veins

Resp: Normal chest excursion with respiration, breath sounds clear and equal bilaterally; no wheezes,

rhonchi, or rales



*Remember to use the full course of therapy—7 days.

IMPORTANT SAFETY INFORMATION

VIGAMOX® solution is indicated for the treatment of bacterial conjunctivitis caused by susceptible strains of the following organisms: Corynebacterium species‡, Micrococcus luteus‡, Staphylococcus aureus, S. epidermidis, S. haemolyticus, S. hominis, S. warneri‡, Streptococcus pneumoniae, Streptococcus viridans group, Acinetobacter lwoffii‡, Haemophilus influenzae, Haemophilus parainfluenzae‡, Chlamydia trachomatis (‡efficacy for this organism was studied in fewer than 10 infections). VIGAMOX® solution is contraindicated in patients with a history of hypersensitivity to moxifloxacin, to other fluoroquinolones, or to any of the components in this medication. NOT FOR INJECTION. VIGAMOX® solution should not be injected subconjunctivally, nor should it be introduced directly into the anterior chamber of the eye. In patients receiving systemically administered quinolones, including moxifloxacin, serious and occasionally fatal hypersensitivity (anaphylactic) reactions have been reported, some following the first dose. As with other anti-infectives, prolonged use of VIGAMOX® solution may result in overgrowth of non-susceptible organisms, including fungi. The safety and effectiveness of VIGAMOX® solution in infants below 1 year of age have not been established. The most frequently reported ocular adverse events were conjunctivitis, decreased visual acuity, dry eye, keratitis, ocular discomfort, ocular hyperemia, ocular pain, ocular pruritus, subconjunctival hemorrhage, and tearing. These events occurred in approximately 1%–6% of patients.

Vigamox^{*}

(moxifloxacin hydrochloride ophthalmic solution) 0.5% as base

DESCRIPTION: VIGAMOX® (moxifloxacin HCl ophthalmic solution) 0.5% is a sterile ophthalmic solution. It is an 8-methoxy fluoroquinolone anti-infective for topical ophthalmic use.

anti-infective for topical opinitalinic use.

CLINICAL PHARMACOLOGY:
Microbiology:
The following in vitro data are also available,
but their clinical significance in ophthalmic
infections is unknown. The safety and
effectiveness of VIGAMOVS solution in treating
ophthalmological infections due to these
micrographicies have not been established in microorganisms have not been established in adequate and well-controlled trials.

The following organisms are considered breakpoints. However, a correlation between the in vitro systemic breakpoint and ophthalmological efficacy has not been established. The list or graphs in provided as without the systemic breakpoint and ophthalmological efficacy has not been established. The list of organisms is provided as guidance only in assessing the potential treatment of conjunctival infections. Moxifloxacin exhibits in vitro minimal inhibitory concentrations (MICs) of 2 µg/ml or less (systemic susceptible breakpoint) against most (≥ 90%) strains of the following ocular pathogens.

Aerobic Gram-positive microorganisms:

Staphylococcus saprophyticus Streptococcus agalactiae Streptococcus mitis Streptococcus pyogenes Streptococcus Group C, G and F

Aerobic Gram-negative microorganisms:
Acinetobacter baumannii
Acinetobacter calcoaceticus Citrobacter freundii Citrobacter koseri Enterobacter aerogenes Enterobacter cloacae Escherichia col Klebsiella oxytoca Klebsiella pneumoniae Moraxella catarrhalis Morganella catarmans Morganella morganii Neisseria gonorrhoeae Proteus mirabilis Proteus vulgaris Pseudomonas stutzeri

Anaerobic microorganisms: Clostridium perfringens

Fusobacterium species Prevotella species Propionibacterium acnes

Other microorganisms: Chlamydia pneumoniae Legionella pneumophila Mycobacterium avium Mycobacterium marinum

Mycoplasma pneumoniae **Clinical Studies:**

In two randomized, double-masked, multicenter, In two randomized, double-masked, multicenter, controlled clinical trials in which patients were closed 3 times a day for 4 days, VIGAMOX® solution produced clinical cures on day 5-6 in 66% to 69% of patients treated for bacterial conjunctivitis. Microbiological success rates for the eradication of the baseline pathogens ranged from 84% to 94%. Please note that microbiologic eradication does not always correlate with clinical outcome in anti-infective trials.

INDICATIONS AND USAGE: VIGAMOX® solution is indicated for the treatment of bacterial conjunctivitis caused by susceptible strains of the following organisms:

Aerobic Gram-positive microorganisms: Corynebacterium species* Micrococcus luteus* Micrococcus luteus*
Staphylococcus aureus
Staphylococcus epidermidis
Staphylococcus haemolyticus
Staphylococcus haemolyticus
Staphylococcus wameri*
Streptococcus pneumoniae
Streptococcus viridans group

Aerobic Gram-negative microorganisms:

Haemonhilus influenzae Haemophilus parainfluenzae

Other microorganisms: Chlamvdia trachomatis

*Efficacy for this organism was studied in fewer than 10 infections

CONTRAINDICATIONS: VIGAMOX® solution is contraindicated in patients with a history of hypersensitivity to moxifloxacin, to other quinolones, or to any of the components in this medication

WARNINGS: NOT FOR INJECTION.

VIGAMOX® solution should not be injected subconjunctivally, nor should it be introduced directly into the anterior chamber of the eye.

directly into the anterior chamber of the eye. In patients receiving systemically administered quinolones, including moxifloxacin, serious and occasionally fatal hypersensitivity (anaphylactic) reactions have been reported, some following the first dose. Some reactions were accompanied by cardiovascular collapse, loss of consciousness, angioedema (including larrygeal, pharygeal or facial edema), airway obstruction, dyspnea, urticaria, and itching. If an allergic reaction to moxifloxacin occurs, discontinue use of the drug. Serious acute hypersensitivity reactions may require immediate emergency treatment. Oxygen and airway management should be administered as clinically indicated.

as clinically indicated. PRECAUTIONS:

PRECAUTIONS:
General: As with other anti-infectives, prolonged use may result in overgrowth of non-susceptible organisms, including fungi. If superinfection occurs, discontinue use and institute alternative therapy. Whenever clinical judgment dictates, the patient should be examined with the aid of magnification, such as slit-lamp biomicroscopy,

and, where appropriate, fluorescein staining. Patients should be advised not to wear contact lenses if they have signs and symptoms of bacterial conjunctivitis.

Information for Patients: Avoid contaminating the applicator tip with material from the eye fingers or other source.

Systemically administered quinolones including moxifloxacin have been associated with hypersensitivity reactions, even following a single dose. Discontinue use immediately and contact your physician at the first sign of a rash or allergic reaction.

Drug Interactions: Drug-drug interaction studies have not been conducted with VIGAMOX® solution. In vitro studies indicate that modificacin does not inhibit CYP34A, CYP2D6, CYP2C9, CYP2C19, or CYP1A2 indicating that moxifloxacin is unlikely to alter the pharmacokinetics of drugs metabolized by these cytochrome P450 isozymes.

by these cytochrome P450 isozymes. Carcinogenesis, Mutagenesis, Impairment of Fertility: Long term studies in animals to determine the carcinogenic potential of moxifloxacin have not been performed. However, in an accelerated study with initiators and promoters, moxifloxacin was not carcinogenic in rats following up to 38 weeks of oral dosing at 500 mg/kg/day (approximately 21,700 times the highest recommended total daily human ophthalmic dose for a 50 kg person, on a mg/kg basis). basis).

Moxifloxacin was not mutagenic in four bacterial strains used in the Ames Salmonella reversion assay. As with other quinolones, the positive response observed with moxifloxacin in strain TA 102 using the same assay may be due to the inhibition of DNA gyrase. Moxifloxacin was not mutagenic in the CHO/HGPRT mammalian cell gene mutation assay. An equivocal result was obtained in the same assay when v79 cells were obtained in the same assay when V/3 cells wer used. Moxifloxacin was clastogenic in the v/9 chromosome aberration assay, but it did not induce unscheduled DNA synthesis in cultured rat hepatocytes. There was no evidence of genotoxicity in vivo in a micronucleus test or a dominant lethal test in mice.

Moxifloxacin had no effect on fertility in male MoXinoxacin nad no errect on retrility in male and female rats at oral doses as high as 500 mg/kg/day, approximately 21,700 times the highest recommended total daily human ophthalmic dose. At 500 mg/kg orally there were slight effects on sperm morphology (head-tail separation) in male rats and on the estrous cycle in female rats.

rats and on the estrous cycle in female rats. Pregnancy: Teratogenic Effects. Pregnancy: Teratogenic Effects. Pregnancy Category C: Moxifloxacin was not teratogenic when administered to pregnant rats during organogenesis at oral doses as high as 500 mg/kg/day (approximately 21,700 times the highest recommended total daily human ophthalmic dose), however, decreased fetal obdy weights and slightly delayed fetal skeletal development were observed. There was no evidence of teratogenicity when pregnant Cynomolgus monkeys were given oral doses as high as 100 mg/kg/day approximately 4,300 times the highest recommended total daily human ophthalmic dose). An increased incidence of smaller fetuses was observed at 100 mg/kg/day. Since there are no adequate and well-controlled studies in pregnant women, VIGAMOX® solution should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: Moxifloxacin has not been measured in human milk, although it can be presumed to be excreted in human milk. Caution should be exercised when VIGAMOX® solution is administered to a nursing mother.

Pediatric Use: The safety and effectiveness of VIGAMOX® solution in infants below 1 year of age have not been established.

There is no evidence that the ophthalmic administration of VIGAMOX® solution has any effect on weight bearing joints, even though oral administration of some quinolones has been shown to cause arthropathy in immature animals. Geriatric Use: No overall differences in safety

and effectiveness have been observed between elderly and vounger natients

ADVERSE REACTIONS:

The most frequently reported ocular adverse events were conjunctivitis, decreased visual acuity, dry eye, keratitis, ocular discomfort, ocular hyperemia, ocular pain, ocular prurit subconjunctival hemorrhage, and tearing. These events occurred in approximately 1-6% of patients

Nonocular adverse events reported at a rate of 1-4% were fever, increased cough, infection, otitis media, pharyngitis, rash, and rhinitis.

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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.

Card: Regular rhythm, tachycardia, without mur-

murs, rub or gallop

Chest: No pain with palpation

Abd: Non-distended; non-tender, soft without rigid-

ity, rebound or guarding, no pulsatile mass

Extremities: Pulses 2+ and equal X 4 extremities, no

peripheral edema or calf muscle pain

ORDERS/RESULTS:

ECG (at 00:11) Orders: Ativan

Labs: WBC: 6.9 (4.6-10.2); **Hgb:** 16.6 (13.5-17.5); PLT: 220 (142-424), lytes, BUN/creat - WNL. Trop I .06 (.00-.27); fingerstick blood sugar-

CXR: normal portable chest

Progress Note: I spoke with this patient at length. He says he feels "100% better". He has been stable throughout his stay. The pressure he described earlier to the physician assistant is not reproducible with exertion. He regularly exercises and does not experience chest pain. He states he does not use cocaine. He had a negative stress test last year. Overall I believe his symptoms are more consistent with anxiety and am very comfortable with sending him home.

DIAGNOSIS:

- 1. Chest pain- atypical
- 2. Anxietv
- 3. Tachycardia-supraventricular

DISPOSITION:

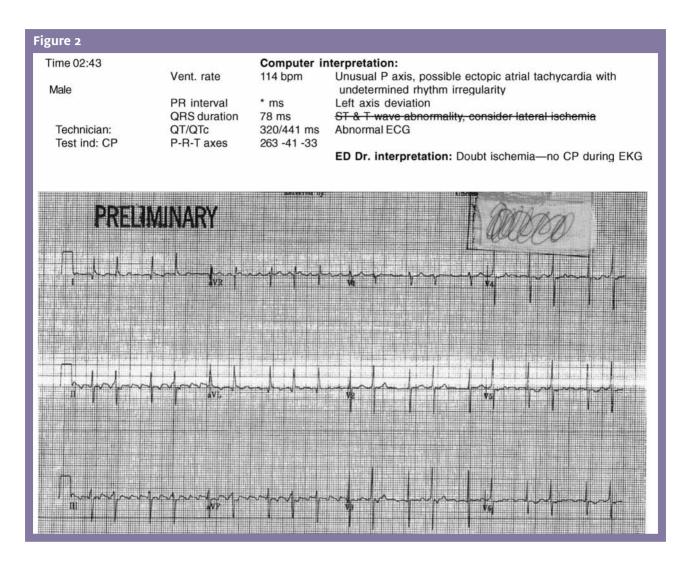
The patient was discharged to home accompanied by spouse. Follow-up with primary care physician in 2 days. AfterCare instructions for anxiety. Prescription for Ativan (lorazepam) 1mg. Sixteen (16).

Discussion of Risk Management Issues at Initial Visit

Point 1: Anxiety should be the diagnosis of last resort after an organic cause has been excluded.

Discussion: We need to avoid tunnel vision when a patient suggests a diagnosis. Often, the biggest impediment to establishing a correct diagnosis is a previous diagnosis.

Our patient has a history of "anxiety," but we do not know how this was determined. Did the patient diagnose himself, or was there an evaluation performed by a physician? Is there a possibly an organic



cause, such as hyperthyroidism, cardiac arrhythmia, pheochromocytoma, or a drug interaction which is incorrectly being attributed to anxiety?

Maintaining an open differential diagnosis often will keep the practitioner out of trouble, especially when dealing with high-risk chief complaints, such as one that has both cardiovascular and neurologic components.

Point 2: His vital signs and ECG do not support a diagnosis of anxiety.

Discussion: A heart rate of 158 is fast for anxiety to be the culprit. It is impossible to tell from the ECG if this is flutter, or accelerated atrial or junctional rhythm. A lightheaded patient with tachycardia should be considered unstable and a candidate for prompt chemical or electrical rate control.

Point 3: This patient was not correctly risk stratified when

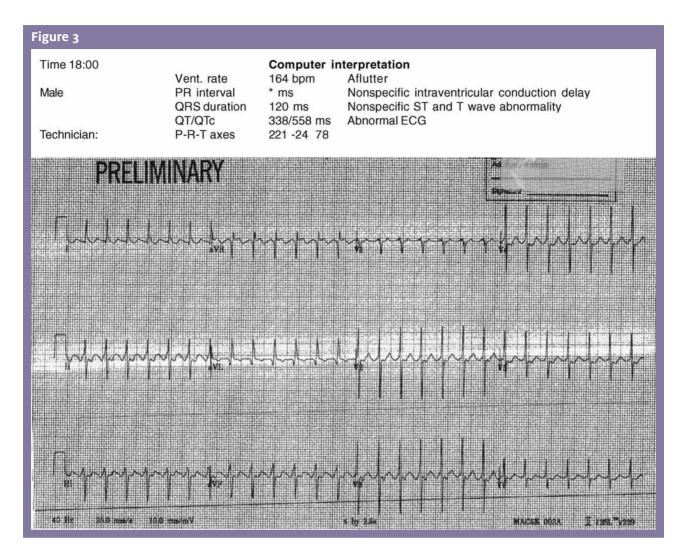
evaluating cardiac causes. He is describing a fluttering of his chest, lightheadedness, and pain radiating to left arm.

Discussion: The possibility of cardiac ischemia causing an arrhythmia resulting in lightheadedness would not be unusual. The most common cause of death in 50-year-old males is cardiac disease, and there is nothing atypical about mild substernal chest pain radiating to left chest wall and left upper arm.

This male in his late 50s has a past history of heavy alcohol abuse, as evidenced by development of pancreatitis and pseudocyst. Cardiomyopathy, a risk factor for an arrhythmia, should be considered.

An additional cardiac risk factor would be untreated elevated triglycerides.

A history of a recent negative stress test does not rule out acute coronary syndrome (ACS); in fact, the sensitivity of this test is only 70% to 80%.



When a patient has chest pain, the nidus is on us to exclude cardiac disease as an etiology of the symptoms.

Point 4: The ECG was misread—not only by the doctor, but also by the computer.

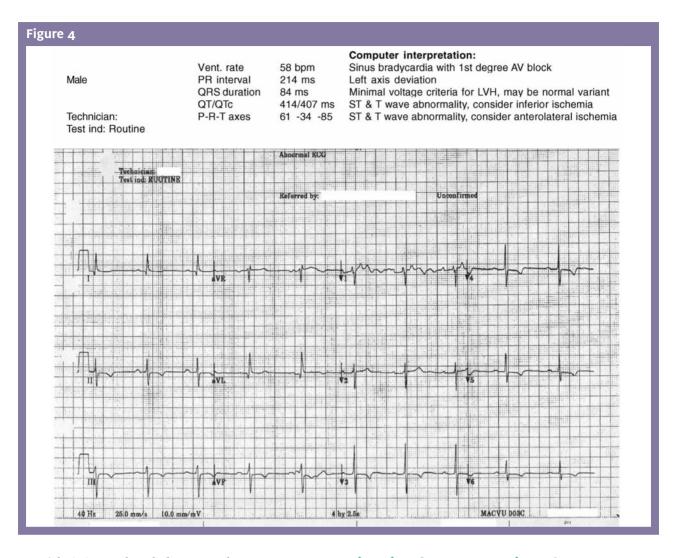
Discussion: When reading ECGs, look at the tracing first, provide your own interpretation, then see what the computer thinks.

If there was a question about the interpretation, a consult could have been obtained to more accurately integrate this data in light of the patient's symptoms. Faxing a questionable ECG to a cardiologist or the local ED is usually quick and can lead to valuable information.

Bounceback Visit

Same day the ECG is correctly read by 2^{nd} physician as atrial flutter and pt. is sent to the ED.

- To ED at 17:05 with pulse 166, resp 24, BP 157/114, sat 96%
- HPI: Difficult historian, mild intermittent tight left sided chest pain with radiation to left arm for last 6 months but currently pain free. No exertional chest pain. Assoc. diaphoresis but no Dyspnea. No improvement with ativan.
- PE: WNL except tachycardia
- ED course:
- 17:48 Aspirin 325mg PO
- 18:02 Cardizem 20mg IVP, cardizem drip 10mg/hour. Heart rate promptly drops to 90. BP 160/98
- 20:23 Lovenox 1m/kg
- Labs: Thyroid studies and cardiac enzymes WNL
- Diagnosis: New onset atrial flutter with RVR, chest pain



Admission and cardiology consult

Discussion of Visit and Risk-management Issues

There was a good policy in place for review of ECGs, and the misread was caught and addressed, but not before the patient had over 24 hours of a heart rate 150 beats per minute (BPM).

It is noteworthy that his chest pain did have some atypical features. However, the first physician should not have been deterred from further evaluating this concerning symptom with more definitive tests rather than just relying on history and conjecture alone.

The patient's normal stress test from the previous year does not protect him from having ACS. In fact, this physician could have completely missed the correct ECG diagnosis (as he did here), and still make the correct disposition decision of admission with a cardiology consult.

Discussion of ECG Interpretation and Management

The first step in evaluating any tachycardia is to categorize it as narrow or wide, and then as regular or irregular.

A narrow QRS duration is 80msec and reflects the activation of the ventricles via the normal His-Purkinje system. Most narrow complex tachycardias other than afib and multifocal atrial tachycardia (MAT) are associated with a regular ventricular rate.

The differential diagnosis of narrow complex tachycardia is broad and includes a-fib, a-flutter, and a variety of paroxysmal SVTs such as atrial tachycardia and AV nodal reentrant tachycardia.

It is essential to determine four specific features of the atrial activity:

- the atrial rate
- the p wave morphology (same as sinus, retrograde, or abnormal)

Call for Articles

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

Physicians, physician assistants, and nurse practitioners, whether practicing in an urgent care, primary care, hospital, or office environment, are invited to submit a review article or original research for publication in a forthcoming

Submissions on clinical or practice management topics, ranging in length from 2,500 to 3,500 words are welcome. The key requirement is that the article address a topic relevant to the real-world practice of medicine in the urgent care setting.

> Please e-mail your idea to JUCM Editor-in-Chief Lee Resnick, MD at

He will be happy to discuss it with you.



position of the p wave in relation to the QRS complex (the RP relationship)

■ the relationship between atrial and ventricular rates (1:1 or not)

If the P waves are not easily identified, then maneuvers such as vagal stimulation and adenosine should be considered to further evaluate the characteristic of the abnormal rhythm. Atrial flutter can often be distinguished from other SVTs by its unique "saw-tooth" pattern. Typically, the atrial rate is close to 300 BPM with a 2:1 AV block resulting in a ventricular rate of 150 BPM.

Studies of patients with atrial flutter who are not anticoagulated reveal a left atrial thrombus in 6% to 43% of patients. Cardioversion without anticoagulation results in a 1.7% to 7.3% rate of embolic complications. Generally, if the atrial flutter is present for over 48 hours, anticoagulation is continued for four weeks prior to and four weeks following cardioversion.

Take-home Teaching Points

- Don't fall into the trap of tunnel vision when patients offer explanations for their symptoms (i.e., "My panic attacks have been worse these last few days"). Assume it's not anxiety until proven otherwise. All patients with psychiatric diagnosis will eventually die of an organic illness.
- Be sure the discharge diagnosis is supported by the physical findings and lab results. A heart rate of 150 in a 57-year-old man with chest pain is concerning for acute cardiac syndrome, regardless of the ECG interpretation.
- A regular narrow QRS tachycardia with a rate of 150 to 160 BPM is a classic presentation of atrial flutter.
- If there is difficulty in determining the rhythm because of a fast heart rate, run a rhythm strip at twice the normal paper speed.
- A previous normal stress test does not guarantee any-
- When in doubt, get a consult.

Follow-up

The hospital course was uneventful. The patient converted to sinus rhythm spontaneously. He underwent a stress echocardiogram which was unchanged from prior studies. He was discharged on metoprolol succinate 50 mg QD with cardiology follow-up. ■

Suggested Readings associated with this article are available at www.jucm.com.



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.



The patient is a 14-year-old boy who presents with low back pain after falling from "a high height" and landing on his feet.

Exam is normal except for tenderness in the mid-lumbar region.

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.

INSIGHTS IN IMAGES: CLINICAL CHALLENGE

THE RESOLUTION



This patient suffered a stable fracture of the L3 vertebra, confirmed by CT. He was discharged home with instructions to follow up with an orthopedist.

This case serves as an important reminder about high-impact injuries. While this patient did not experience a direct blow to the back, the mechanism of injury, in combination with point tenderness, mandates imaging.

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

This case is one of 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.





The patient is a 23-year-old healthy male presenting for a "wound check."

Four weeks prior, the patient had crushed his left fifth finger in a car door. Initial x-rays were negative for a fracture. He was placed on cephalexin because of a small avulsion of skin on the distal aspect of the finger.

On current exam, the distal aspect of the dermis of the fifth finger has sloughed off. The underlying tissue is pink without pustular drainage or swelling and granulation tissue is present. There is decreased range of motion at the DIP joint and pain with palpation.

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.

INSIGHTS IN IMAGES: CLINICAL CHALLENGE: CASE 2

THE RESOLUTION



There are erosive changes in the distal phalanx of the fifth finger, with loss of the overlying cortex, suspicious for osteomyelitis.

While plain films will have non-specific changes early in the disease process, osseous changes will often be visible after 10-14 days. Most osteomyelitis after a trauma are from a contiguous spread from an adjacent soft-tissue infection.

This patient was admitted and found to have a small abscess that was cultured to grow methicillinresistant Staphylococcus aureus (MRSA). He was started on IV vancomycin and discharged home with PO trimethoprim/sulfamethoxazole for six weeks.

Acknowledgment: Case presented by Sara A. Lolar, PA-C, Detroit Receiving Hospital Emergency Department; Wayne State University Physician Assistant Studies Program, Detroit, MI.



ABSTRACTS IN URGENT CARE

On Copayments for Ambulatory Care, Errors in Pediatric Deaths, and Pneumococcal Conjugate Vaccine and Empyema

■ NAHUM KOVALSKI, BSc, MDCM

ach 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.

Consequences of Increasing Copayments for Ambulatory Care

Key point: Even small increases in cost-sharing were associated with fewer outpatient visits and more inpatient admissions among elders.

Citation: Trivedi AN, Moloo H, Mor V. Increased ambulatory care copayments and hospitalizations among the elderly. N Engl J Med. 201028;362:320-328.

Recently, many health plans have increased copayments for outpatient visits. Although the rationale, presumably, is to minimize unnecessary ambulatory care, the strategy could backfire if higher copayments dissuade patients from obtaining necessary clinical services.

To examine this issue, researchers analyzed data from 36 Medicare managed care plans with nearly 1 million enrollees. In 18 plans, mean copayments for outpatient visits increased during the study period (2001–2006), from a mean of \$7 to \$14 for primary care visits and from \$13 to \$22 for specialist visits.

During the year after outpatient copayments increased, 20 fewer outpatient visits occurred per 100 enrollees (compared with plans that did not change copayments). However, annual inpatient admissions increased by two per 100 enrollees and inpatient days increased by 13 per 100 enrollees after copay-



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

ments increased. Annual outpatient expenditures fell by an estimated \$7,150 per 100 enrollees, but this savings was negated by inpatient expenditures, which increased by an estimated \$24,000 per 100 enrollees annually.

[Published in J Watch General Med, January 28, 2010—Allan S. Brett. MD.1

Errors Found in Pediatric Deaths Due to Severe Bacterial Infection

Key point: Most cases of death secondary to severe bacterial infection were those where management was suboptimal. Citation: Launay E, Gras-Le Guen C, Martinot A, et al. Suboptimal care in the initial management of children who died from severe bacterial infection: A population-based confidential inquiry. Pediatr Crit Care Med. 2010; Jan 9. [Epub ahead of print]

This retrospective study analyzed all deaths from severe bacterial infection in pediatric patients at least 3-months-old in a geographic zone of France from 2000 through 2006.

Of 23 deaths from severe bacterial infection, 21 could be analyzed; management was considered suboptimal in 76%. The types of errors identified included:

- parental delay in seeking medical care
- physicians' delay in administering appropriate treatment (antibiotic therapy in the case of purpura)
- insufficient doses of or failure to repeat fluid resuscitation
- overall underestimation of disease severity

This study found a high frequency of suboptimal care in the initial management of children who died of severe bac-

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OCCUPATIONAL MEDICINE

Understanding and Embracing the Phrase 'It Depends'

FRANK H. LEONE, MBA, MPH

Pales and marketing is an art, not a science. "Rules," such that they are, are meant to be broken as the circumstances fac-Uing one marketer are likely to be different than those facing other marketers.

That is, sales professionals—or anyone tasked with selling or marketing urgent care occupational medicine services—should not view their world in black and white, but rather in gray as part of a full spectrum of tactics and approaches.

Six variables should be considered when you stake out market position:

#1: Market Size

Typical question: "Given finite time and staff, how much emphasis should our clinic place on marketing vs. sales?"

Answer: It depends. Prudent market outreach is likely to vary markedly from a big city to a small and rural market.

The larger the market, the more your clinic should view sales and marketing as a "numbers game." In larger markets, keep in close written (i.e., e-mail, as well as traditional correspondence) contact with hundreds of employer prospects, and place proportionately greater emphasis on marketing rather than direct sales.

In other words, the larger your market, the more time should be spent on marketing.

As you move along the continuum toward smaller markets, the opposite strategy holds true: place proportionately less emphasis on multiple high-touch marketing techniques and place greater reliance on direct correspondence and face-to-face meetings (sales).



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.

#2: Market Position

Typical question: "How does our clinic determine what the highest priority marketing tactics are?"

Answer: It depends. Consider your position in the market. If you are the market leader, your marketing tactics should emphasize your market leader position, your program's experience, and a "why take a chance with a lesser option?" message.

If you are a "market challenger" (that is, an active clinic that is simply not the market leader), your tactics should focus on key points of differentiation (e.g., location, 24-hour service) and hammer away on the benefits of this unique

If you are a recent market entry, you need to position yourself as something new and fresh.

#3: Delivery Site Options

Typical question: "How does an urgent care clinic best compete against hospital-based or affiliated programs?"

Answer: It depends. If you represent a freestanding clinic (or network of clinics), you should emphasize such perceived advantages as easy access, fast service, and direct

And, of course, there are hybrid models between these extremes that require some blend of these differentiation points. If your clinic actually represents a health system or hospital, you can put forth several perceived competitive advantages, such as breadth of services, short term—if not immediate—access to specialists, and (hopefully) a history of longstanding respect within your community.

#4: Institutional Culture

Typical question: "How does our clinic deal with an organizational culture that is not hospitable to sales and marketing?"

Answer: It depends on the roots of your organizational culture. Is your clinic clearly conservative and resistant to

Continued on page 34



HEALTH LAW

Using Evidence-based Care Paths

■ JOHN SHUFELDT, MD, JD, MBA, FACEP

scar Wilde was quoted as saying, "Life imitates art far more than art imitates life." This was never more apparent to me Uthan a few Mondays ago when I was paraded in front of a number of primary care doctors who questioned the use of "care paths" in urgent care medicine.

The leader of the mob was a gentleman who was the patriarch of a local family practice clinic. The meeting opened this way: "I don't like you, I don't like what you are doing, and I don't like the fact you are here!"

Now, once would have been tolerable; even twice would have been OK. But, he said that exact same sentence to me three times over the course of a 45-minute diatribe. I wanted to say, "It sounds like you have a case of the Mondays!" But it was a serious meeting so I responded, "Wow, you just met me; it usually takes people at least 15 minutes to realize they don't like me."

For a brief moment, I felt like the antithesis of Sally Field as she gave her 1985 Academy Award acceptance speech ("I haven't had an orthodox career...and I can't deny the fact that you like me, right now, you like me!").

As it turns out, however, it was not only me he didn't like; it was also the use of "care paths" in an urgent care setting. His invectives were directed at me in my role as chief executive officer of NextCare—a capacity in which I've instituted care paths at our clinics. His unwavering belief, however, is that only the doctor knows what to do for the patient; hence, to his way of thinking, the use of care paths and order sets have no place in healthcare. I know what you are thinking, "Toto, I've a feeling we're not in Kansas anymore...;" we are in 2010.

The mob's contention was that care paths increase the cost of care unnecessarily by "prescribing" a course of treatment which can be initiated before the provider who ultimately gives care actually sees the patient.

On the other side of the coin is the rationale for care paths



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having been implemented in emergency departments and other institutions across the country. By recommending tests and diagnostics based on the presenting complaints, care paths increase the likelihood that the patient will be evaluated to a degree appropriate for those complaints, thereby increasing efficiency and, more importantly, protecting the patient.

This is especially relevant in the ED and the urgent care center; since we don't have the luxury of a longitudinal relationship with the patient, we cannot simply try different diagnostic and therapeutic approaches based upon the patient's response. We have "one bite of the apple" to get it right.

For example, a 45-year-old male who presents with chest pain would, based on care path, receive an EKG and troponin; a 26year-old female with lower abdominal pain would get a urinalysis and pregnancy test. Clearly, not rocket science.

Although CMS does not specifically opine upon the use of standing orders in an urgent care setting, in the hospital context, CMS has expressed support for use of such orders.

In a Survey and Certification Group letter dated October 24, 2008, CMS writes:

"CMS strongly supports the use of evidence-based protocols to enhance the quality of care provided to hospital patients. Many hospitals employ such protocols developed by physicians and... staff that are designed to standardize and optimize patient care in accordance with current clinical guidelines or standards of practice."

About a week after the meeting I described, the following (redacted) article appeared in the local paper where this group's office-based practice was located. (The provider mentioned in the story was *not* part of the practice with whom I met.)

"An XXXX County doctor has been reprimanded by the XXXX Board of Medicine for failing to properly diagnose and treat a patient with heart problems. The medical board said that Dr. XXX 'failed to appreciate' that her patient's symptoms were 'risk factors for an acute cardiac event.' Immediately after the man left...he was in a single-car auto accident and died. The medical board disciplined XXX at a hearing. The board ordered her to take 12 hours of continuing education classes in emergency and urgent care....

HEALTH LAW

"According to board documents, the 52-year-old man, identified in the board's order as 'Patient A,' came to XXX after having heartburn for three weeks. He described his pain as 'pressure-like,' according to XXX's office note. The man had a history of high blood pressure, used tobacco and alcohol and did not take his medicine regularly. His blood pressure in her office was 200/100. According to the board's findings, XXX failed to take and record a complete medical history of the man, did not repeat the blood-pressure test and did not do an electrocardiogram or perform lab tests to rule out heart problems as the cause of his distress.

"XXX told the medical board that she counseled the man about his diet. She prescribed a blood-pressure medicine and one for gastro-esophageal reflux. She also told the man to return for a follow-up visit in two weeks.

"'Immediately after leaving Dr. XXX's office, Patient A was involved in a fatal single-car motor vehicle accident,' according to the board's order. The man's death certificate listed blunt head trauma as the cause of his death. The death certificate also said that his heart condition was a 'significant condition' contributing to his death. No postmortem exam was done.

XXX graduated from the University School of Medicine, according to her profile on the Board of Medicine' Web site....She also was an instructor at the XXXX School in 2006-07. She obtained her medical license in 2006."

Sound like any one of hundreds of patients who walk into urgent care centers across the country on any given day?

If this patient had gone to a practice which followed evidence-based care paths would he be alive today? Maybe. At the very least, however, he probably would have had the benefit of a complete evaluation.

Clearly, the doctor involved in the aforementioned medical misadventure is well trained and well meaning. This unfortunate incident simply reinforces the fact that good doctors, like everyone else, can make mistakes. What makes it so much worse for providers is that when we make mistakes, the outcomes can be catastrophic. Lives can be lost and careers ruined.

Practicing medicine, like being a professional pilot, is a challenging and unforgiving career choice inasmuch as the tolerance for errors, human or mechanical, is very narrow. We can learn something from our aviation brethren, where the use of automated check lists and standard protocols has been commonplace since the days of Wiley Post.

To finally get to that point, we have to leave our egos on the tarmac and accept the fact that even medical care providers are fallible.

OCCUPATIONAL MEDICINE

"Your clinic's approach depends on assessing your unique position in the market."

change, or is it forward-thinking and willing to do things innovatively and with a splash? Or is it somewhere in between? How deeply held and changeable is this cultural bias?

At the end of the day, your sales and marketing approach has got to be in line with your organizational culture and on the lookout for signs that this culture is open

#5: Personnel Characteristics

Typical question: "What sales and marketing responsibilities can I add to the job descriptions for various personnel in our clinic?"

Answer: It depends. Assume you are a basketball coach and your team is comprised primarily of small, quick players. Your strategy would be to run, press, and play the game at a frenetic pace. However, if your team is comprised of slow, tall timber, you would in turn slow the game down and work to get the ball inside.

The same principle is true in sales and marketing: play to the strengths of your personnel by designing marketing tactics that fit the collective personality of your team.

#6: Your Clinic Vision

Typical question: "You suggest addressing both short-term goals and long-term positioning in our marketing plan. What percentage of the plan should address long-term goals?"

Answer: It depends. You need to go back to square one and reflect on why your clinic made a commitment to occupational health in the first place.

For example, is your commitment to occupational health's raison d'etre to serve as a basic occupational health clinic or does ownership view occupational health as a foundation for a more highly integrated and continually evolving series of services? Finding the proper place on this basic service/integrated service continuum allows your clinic do place the proper short-term/long-term division in your marketing plan.

The common thread of this column is that your clinic's approach to sales and marketing depends on assessing your unique position in the market. Think of every variable as a continuum upon which your clinic may be at one end or the other or somewhere in the middle. When it comes to sales and marketing, one size does not fit all. ■



CODING Q&A

Consult Codes, Injection Codes, and Coding for Diabetes Education and In-House Dispensing

■ DAVID STERN, MD, CPC

My codes for consults seem to suddenly be getting denied as invalid. I checked my CPT book, and the codes are still listed as valid. What's going on?

Question submitted by multiple urgent care billers

Yes, you are right that the consultation codes (99241-99245, 99251-99255) are still valid per CPT, as published by the AMA. CMS, however, has decided to no longer reimburse for these codes and has now changed the status indicator to an "I" (invalid for Medicare). Some other payors have decided to follow suit. Instead of billing consult codes, physicians should code either a new patient visit code (99201-99205) if the patient visit meets new patient criteria or an established patient visit code (99211-99215) if the patient visit does not meet new patient criteria. Medicare will not convert a consultation code to a standard physician office E/M code. Instead, Medicare will simply deny the code.

This change will result in a significant loss of revenue for specialist physicians, many of whom have frequently coded consult codes in the past. In the urgent care setting, however, these codes have rarely been used. When used in urgent care, these codes were usually coded for preoperative clearance exams.

You may ask individual payors if they plan to follow suit. Even if payors tell you that you may continue to bill these codes, if you decide to continue billing them to non-government payors, you should watch closely for denials. Individual payors have a tendency to follow Medicare's lead, especially when it can result in savings to the payor. Many payors that are cur-



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rently reimbursing for consult codes may discontinue this reimbursement without warning to providers.

How is it legal for Medicare to deny these codes when these codes remain perfectly valid CPT codes.

Question submitted by multiple urgent care billers

You are right; at least for now, the consultation codes do remain in the CPT book. Any specific payor, however, may make an individual decision to discontinue payment for certain valid CPT codes. Unlike non-government payors, however, Medicare has a very public and complicated process to change reimbursement. Even so, Medicare, may unilaterally decide (without appealing to or waiting for a corresponding change in CPT by the AMA) to eliminate payment for any existing CPT codes.

I was reading through a previous issue of JUCM and read a statement that when charging J2550 (phenergan) it is also appropriate to bill the injection code 96372. Does this apply to all J codes that are injections? I assume we can charge this code if no other services were billed and the visit was for a therapeutic injection only. I have been told, however, that if you bill an E/M to insurance, then the injection is included in the E/M. Is this true?

Question submitted by Jennifer Smith, CPC, Sisters of Mercy Urgent Care, Asheville, NC

A vou may use the injection code (96372) for any injection that meets the definition—i.e., "Therapeutic, prophylactic, or diagnostic injection (specify substance or drug); subcutaneous or intramuscular."

In general, payors do not include the injection code in the E/M. It should be separately coded and separately payable. For Medicare (and some other payors), however, you must add modifier -25 to the E/M code when you code an injection

CODING O&A

code on a claim. Missing modifier -25 will cause denials, so these denials have caused some coders to mistakenly assume that the injection code is bundled into the E/M.

Our practice runs a program for diabetes patients. • The patients see the nurse and fill out a diabetes questionnaire. Can we bill a 99211? The documentation has a brief history, a medication list, and some education (if needed). Is this sufficient to code a 99211?

- Question submitted by Marianela C., Community Health Centers, Inc, Apopka, FL

Some of the visits that you describe may meet the cri-• teria to code a 99211. If the nurse documents a history, vital signs, specific diabetes education, and a plan for treatment and follow-up, this may be adequate for coding a 99211. Remember, in order to code the 99211 compliantly, the patient must have previously had a face-to-face encounter with a provider in the practice to be an established patient, and the rendering physician must be on site at the time this visit occurs.

We just opened an urgent care facility in Florida. We dispense medication if the patient chooses to purchase meds here instead of at the pharmacy. My biller is having trouble finding the correct G or I codes to correspond to the meds to show on the claim form it was purchased by the pt. So far, we've found J0456 for Z-Pak and G0778 for ciprofloxacin. Can you tell us where we can find the rest of the codes for oral medications?

Name withheld

Oral meds do not, generally, have corresponding HCPCS codes and are generally not coded nor billed to private health insurance. For billing these medications to third parties, which is mainly done for worker compensation cases, you should use the appropriate NDC code. The NDC code is unique for each medication for each manufacturer. Thus, you need to watch the code used carefully, as penicillin from one manufacturer will have a different NDC code than penicillin from another manufacturer, and some suppliers may change manufacturers without notice.

Many patients have separate pharmaceutical insurance, but billing to this insurance generally is done only by pharmacies. There are a few pre-packaged medication companies that will set you up as a pharmacy and bill these medications to the patient's pharmaceutical insurance. In many cases, this is not cost effective, as it takes much labor to enter the patient's information, and reimbursement by insurance payors for these medications is quite is typically quite low. There are no CPT or HCPCS codes for pre-packaged medications. The two codes that you have found are not billing codes for pre-packaged medications.

Jo456 is the code for injectable azithromycin, not oral Z-Pack (azithromycin). Using this code for a Z-Pack would be incorrect and noncompliant.

Go778 looks like it is an HCPCS code, but it is not. It is a proprietary identification code used by some pre-packaging companies for internal identification of ciprofloxacin bottle, containing 20 tablets of ciprofloxacin. This code should not be billed to a payor, as it is not a valid code for billing.

I encourage you to attend specialized coding classes or obtain the services of an expert coder/biller. Errors in billing and coding are among the most frequent causes for financial difficulties in opening a new urgent care center.

ABSTRACTS IN CARE URGENT

terial infection, with four separate types of errors. Other studies are needed to assess the potential avoidability of this type of death.

Effect of Pneumococcal Conjugate Vaccine on Incidence of Empyema

Key point: The annual empyema-associated hospitalization rates increased almost 70% between 1997 and 2006. Citation: Li ST, Tancredi DJ. Empyema hospitalizations increased in U.S. children despite pneumococcal conjugate vaccine. Pediatrics. 2010;125(1):26-33.

The purpose of this study was to determine if the incidence of empyema among children in the United States has changed since the introduction of the pneumococcal conjugate vaccine in 2000.

During 2006, an estimated total of 2,898 hospitalizations of children ≤18 years of age in the United States were associated with empyema.

The empyema-associated hospitalization rate was estimated at 3.7 per 100,000 children, an increase of almost 70% from the 1997 empyema hospitalization rate of 2.2 per 100.000.

The rate of complicated pneumonia (empyema, pleural effusion, or bacterial pneumonia requiring a chest tube or decortication) increased 44%, to 5.5 per 100,000.

Among children ≤18 years of age, the annual empyemaassociated hospitalization rates increased almost 70% between 1997 and 2006, despite decreases in the bacterial pneumonia and invasive pneumococcal disease rates.

Career Opportunities



Expansion of south Florida's premier **Urgent Care Centers bring opportunity!**

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Charleston Area Medical Center is recruiting for two full-time BC/BE Family Practice, Internal Medicine, Med/Peds or Emergency Medicine physicians to join our Urgent Care team. The facilities have been in operation for more than 25 years, and we have four convenient locations. The hours of operation are from 9 a.m. to 9 p.m., seven days a week. Candidates should have a full range of urgent care skills. Easy referral access to more than 400 subspecialists on staff at our medical center.

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For consideration of our opportunity, please e-mail your formal CV to Carol Wamsley, Manager, Physician Recruitment at carol.wamsley@camc.org. Toll free number: **866-551-8927**.





Charleston Area Medical Center Health System, Inc. 2009

Career Opportunities

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Carilion Clinic is searching for an Urgent Care Physician to work at Carilion Roanoke Community Hospital where the ED has converted to an Urgent Care with the consolidation of two Carilion hospitals located in Roanoke, Virginia. Candidates must be BE/BC in Family Practice or Emergency Medicine with Urgent Care experience preferred. Hours of operation are Sunday – Saturday from 8 a.m. to 8 p.m., anticipating 36,000 visits annually. Flagship ED located within 1 mile for transfers of acute care. Physician Assistants and nursing support 7 days a week. Enjoy working a 36 or 40 hour work-week and every other weekend or 5 out of 10 weekends with days off during the week. Practice with cutting edge technology such as Electronic Medical Records, PACS Imaging and web-based scheduling.

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Carilion Clinic is the largest, not-for-profit integrated health system in southwest Virginia with 8 hospitals, 82 multi-specialty clinics, 8 residency and 3 fellowship programs affiliated with the University of Virginia and VCOM, serving 1.5 million throughout the region. The Virginia Tech Carilion School of Medicine is slated to open Fall 2010. This opportunity offers a salary plus incentive, 10% shift differential 7 p.m - 7 a.m., comprehensive benefits package, relocation, paid malpractice, CME days and allowance, and more.

Visit Carilion Clinic at www.carilionclinic.org

For more information or to submit your CV for consideration, please contact Andrea Henson, Physician Recruiter at 540-224-5241 or ahenson@carilionclinic.org.



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McLeod Health, located in Florence, South Carolina is seeking a BC/BE FM physician to work in our Urgent Care facility. The facility's hours of operation are Monday-Friday 8:00AM-8:00PM and Weekends 9:00AM-4:00PM. The physicians work on average of 72 hours every 2 weeks with every other weekend off.

We offer a very competitive salary, comprehensive benefits package, retirement package, paid malpractice insurance, CME allowance, a relocation allowance and a sign on bonus.

The Urgent Care center has cutting-edge technology with a digital x-ray and CT scanner on site. Made up of 8 rooms and 2 procedure rooms we provide a variety of point of care tests.

Florence, South Carolina offers a wonderful family-oriented life style with great schools, civic events, and sporting events. We are located at the intersection of I-20 and I-95 with a regional airport that is operated by US Air and Delta airlines, making our location easy for travel. In addition, we are 1 hour from the beach, and within 2 hours of Charlotte, North Carolina, and Charleston, South Carolina.

McLeod is dedicated to patient-centered, evidence-based, and physician-lead health care.

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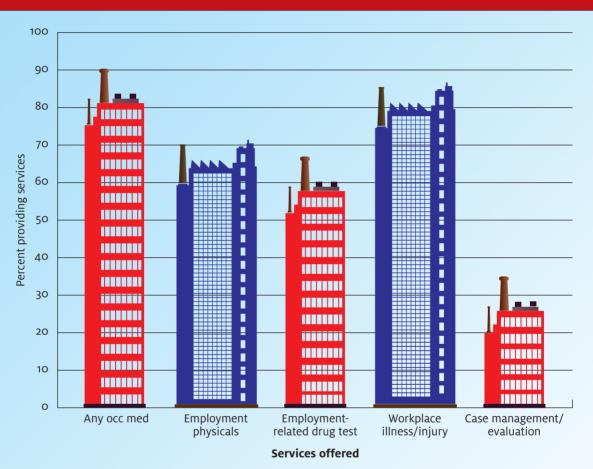


DEVELOPING DATA

n early 2008, UCAOA revamped its annual survey in conjunction with researchers at Massachusetts General Hospital and Harvard University with the goal of assuring that the UCAOA Benchmarking Committee's efforts produced a scientifically valid report. Here, we present some of the data from this landmark survey.

In this issue: What occupational medicine services—if any—are most commonly available in responding urgent care centers?

OCCUPATIONAL MEDICINE IN URGENT CARE



The question regarding occupational medicine was just one segment of a section of questions on services offered in urgent care centers. Future Developing Data pages will offer insight into lab tests processed on site, other diagnostic tests performed on site, and orthopedic-related services.

Acknowledgment: Data submitted by Robin M. Weinick, PhD, at the time of the survey assistant professor, Harvard Medical School and senior scientist, Institute for Health Policy, Massachusetts General Hospital. Dr. Weinick is also a member of the JUCM Advisory Board. Financial support for this study was provided by UCAOA.

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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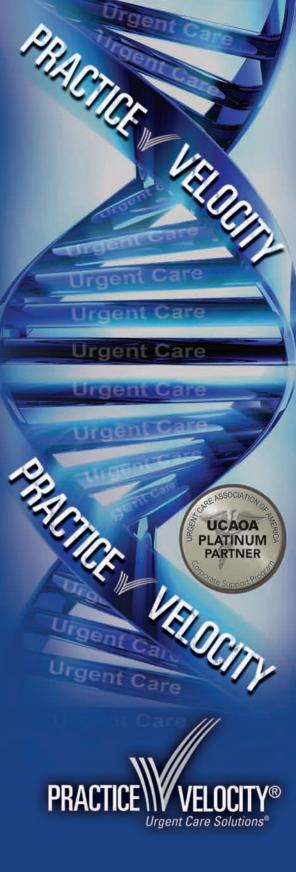


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