



ABSTRACTS IN URGENT CARE

- Watching for the Female Athlete Triad
- Diagnosing Serotonin Syndrome
- Steam Inhalation Doesn't Unstuff Sinuses, but Sinus Irrigation Might
- Adults Can Develop Hand-Foot-and-Mouth Disease
- Restricting Antibiotic Prescribing May Not Increase Risk of Secondary Infections
- Using D-Dimer Values Cuts Down on the Need for Imaging in Possible Embolism
- Researchers Take the First Step Toward a Chlamydia Vaccine
- An Elevated Glucose Level at Discharge Doesn't Mean Patients Will Have to Return for Treatment

■ SEAN M. MCNEELEY, MD

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

Watching for the Female Athlete Triad

Key point: *Understanding the female athlete triad is the best way to identify it.*

Citation: Weiss Kelly AK, Hecht S; Council on Sports Medicine and Fitness. The female athlete triad. *Pediatrics*. 2016;138: e20160922.

The female athlete triad continues to be better understood over time. As more females participate at higher levels of competition this disorder must be considered. The report's authors note that the triad of amenorrhea, osteoporosis, and disordered eating is no longer considered a dyad of present versus absent but rather a spectrum in all three areas. Increased caloric demands and inadequate intake are key hallmarks for this disorder. It also should be noted that the disorder can be focused on one or more of the three areas of concern. Acute-care practitioners may be the only health-care providers that these young females see, so we should be alert for the symptoms of the triad. ■



Sean M. McNeeley, MD, is an urgent care practitioner and Network Medical Director at University Hospitals of Cleveland, home of the first fellowship in urgent care medicine. Dr. McNeeley is a board member of UCAOA, UCCOP, and the Board of Certification in Urgent Care Medicine. He also sits on the *JUCM* editorial board.

Diagnosing Serotonin Syndrome

Key point: *Serotonin syndrome is not easy to diagnose.*

Citation: Werneke U, Jamshidi F, Taylor DM, Ott M. Conundrums in neurology: diagnosing serotonin syndrome—a meta-analysis of cases. *BMC Neurol*. 2016;16:97.

This systematic review describes the findings when a patient's serotonin is at a toxic level. Currently, making the syndrome diagnosis on clinical grounds is challenging. Rapid onset and hyperthermia have long been considered important factors in diagnosis. The authors note that onset depends on the pharmacokinetics of the causative agent. Diagnosing hyperthermia also is based on the presence of multiple factors, including confusion, changes in consciousness, and agitation. Tremor and hyperreflexia are predominant neurologic signs. Tachycardia, hypertension, and fever are also important factors. The diagnosis continues to be challenging, but at least considering it is the most important first step for urgent care providers. ■

Steam Inhalation Doesn't Unstuff Sinuses, but Sinus Irrigation Might

Key point: *Say yes to sinus irrigation, but there is no benefit from steam inhalation.*

Citation: Little P, Stuart B, Mullee M, et al, for the SNIFS Study Team. Effectiveness of steam inhalation and nasal irri-

ABSTRACTS IN URGENT CARE

“The authors found no benefit from steam inhalation and less benefit than previously shown for saline irrigation. Acute-care providers may want to advise patients that steam inhalation may not be beneficial but that saline irrigation may be helpful.”

gation for chronic or recurrent sinus symptoms in primary care: a pragmatic randomized controlled trial. CMAJ. 2016 July 18. doi: 10.1503/cmaj.160362. [Epub ahead of print.]

In the discussion of how to assist patients with chronic or recurrent sinusitis, steam inhalation and sinus irrigation have often come up. In the randomized, controlled study from the United Kingdom reported here, 871 patients were assigned to groups by treatment: standard care, steam inhalation, saline irrigation, or both inhalation and irrigation. The authors found no benefit from steam inhalation and less benefit than previously shown for saline irrigation. Acute-care providers may want to advise patients that steam inhalation may not be beneficial but that saline irrigation may be helpful. ■

Adults Can Develop Hand-Foot-and-Mouth Disease

Key point: *Hand-foot-and-mouth disease is not just for children.*

Citation: Banta J, Lenz B, Pawlak M, et al. Outbreak of hand, foot, and mouth disease caused by Coxsackievirus A6 among basic military trainees—Texas, 2015. *MMWR Morb Mortal Wkly Rep.* 2016;65:678–680.

This is a report from a Texas military base about the spread of hand-foot-and-mouth disease diagnosed in 53 adults in the 2 months after it was diagnosed there in a 22-year-old. The infection rate was 4.7 % of those exposed. Symptoms included malaise, fever, and then oral lesions that spread to the hands and feet. Some patients had lesions that extended beyond the normal surface of the hands and feet. Urgent care providers who remain aware of this etiology, particularly in the summer and fall, will find it easier to arrive at a diagnosis in adults who present atypically. ■

Restricting Antibiotic Prescribing May Not Increase Risk of Secondary Infections

Key point: *Limiting antibiotic prescriptions for respiratory illness appears to be safe.*

Citation: Gulliford MC, Moore MV, Little P, et al. Safety of reduced antibiotic prescribing for self limiting

WE HAVE THE
pulse
ON
URGENT CARE
FINANCING!



SPECIAL OFFER:
6 MONTHS, NO PAYMENTS
ON A BUSINESS LOAN

**Call Robin Studniski or
Tom Ethen For Details - STAT!**
1.888.320.2899


STEARNS
BANK N.A.
We get the job done!

Member FDIC. Equal Housing Lender. 

“When to discharge a patient with an elevated glucose level is an important decision at the point of care. . . . Statistical analysis showed no relationship between discharge glucose level and the need for a return visit or hospital admission.”

respiratory tract infections in primary care: cohort study using electronic health records. *BMJ*. 2016;354:i3410.

One reason for prescribing antibiotics for respiratory illnesses is the fear of a secondary infection. To determine whether this reason is valid, the authors in this cohort study assessed data for a total of 45.5 million patient-years to determine whether the incidence of serious bacterial illness (peritonsillar abscess, pneumonia, mastoiditis, empyema, intracranial abscess, etc.) was higher among patients whose health-care providers wrote fewer prescriptions for antibiotics. The antibiotic prescription rate between 2005 and 2014 for both men and women per 1000 respiratory symptoms had decreased: from 53.9% to 50.5% for men, and from 54.5% to 51.5% for women. Also, rates for all serious bacterial illness except pneumonia decreased; the occurrence rate for pneumonia increased 0.4% over the study’s time frame. A closer look at the data also showed that those providers with the lowest prescribing rate did see more peritonsillar abscesses. For the urgent care provider, this is good news overall. It is important to pay close attention to spot those patients who may be more likely to develop pneumonia or peritonsillar abscesses, as well as to provide good follow-up instructions. Additional retrospective studies are necessary to confirm these findings. ■

Using D-Dimer Values Cuts Down on the Need for Imaging in Possible Embolism

Key point: Adding D-dimer values to the Wells rule decreases need for imaging.

Citation: van Es N, van der Hulle T, van Es J, et al. Wells rule and D-dimer testing to rule out pulmonary embolism: a systematic review and individual-patient data meta-analysis. *Ann Intern Med*. 2016;165:253–261.

This meta-analysis looked at using the Wells criteria and D-dimer testing to rule out pulmonary embolism. A total of 7268 patients were evaluated. The authors concluded that using age-adjusted D-dimer values could increase the percentage of patients, from 28% to 33%, who do not need imaging. The biggest areas of increase were for elderly patients and those with chronic obstructive pulmonary disease. For urgent care providers, deter-

mining which patients are least likely to have an embolism is relevant to daily practice, although a work-up is still necessary for all patients with the potential for embolism. Even without using D-dimer values, embolism was ruled out in the study in 28% of patients on the basis of the Wells rule alone. ■

Researchers Take the First Step Toward a Chlamydia Vaccine

Key point: A chlamydia vaccine may not be far away.

Citation: Bulir DC, Liang S, Lee A, et al. Immunization with chlamydial type III secretion antigens reduces vaginal shedding and prevents fallopian tube pathology following live *C. muridarum* challenge. *Vaccine*. 2016;34:3979–3985.

Chlamydia is the leading sexually transmitted disease in the United States and afflicts 113 million people around the world. Serious infection can be silent and result in infertility. Authors from McMaster University in Canada report a first step in finding a highly effective chlamydia vaccine. After vaccination in mice, vaginal secretions were cleared by 95%, infections cleared sooner, and hydrosalpinx was reduced. A commercially available vaccine is likely years away, even if human trials prove equally as effective. In the meantime, it is important that urgent care providers remember to treat for chlamydia even when only gonorrhea is found. ■

An Elevated Glucose Level at Discharge Doesn’t Mean Patients Will Have to Return for Treatment

Key point: Discharge glucose levels do not predict return visits.

Citation: Driver BE, Olives TD, Bischof JE, et al. Discharge glucose is not associated with short-term adverse outcomes in emergency department patients with moderate to severe hyperglycemia. *Am Emerg Med*. 2016 June 25. doi: 10.1016/j.annemergmed.2016.04.057. [Epub ahead of print.]

When to discharge a patient with an elevated glucose level is an important decision at the point of care. This retrospective chart-review cohort study sought to determine whether the level of glucose at discharge is correlated with the need for a return visit. The inclusion criterion was a glucose level of >400 mg/dL. A total of 422 patients’ charts were reviewed. In the 7 days after discharge, 62 patients were seen again in an emergency department and 36 were admitted to a hospital. Statistical analysis showed no relationship between discharge glucose level and the need for a return visit or hospital admission. For urgent care providers, these findings may help decrease concern about discharging a patient with a mildly elevated glucose level. ■