ABSTRACTS IN URGENT CARE

- Prepare for Drug-Resistant Gonorrhea
- Opioid Prescribing Increases Throughout the Day
- Overcrowded Pediatric Emergency Rooms
- New CDC Guidelines on mTBI in Children
- Two Studies Consider Risks with Syncope Patients

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Each month the College of Urgent Care Medicine (CUCM) provides a handful of abstracts from or related to urgent care practices or practitioners. Glenn Harnett, MD leads this effort.

New Data Show 'Steep and Sustained' Increase in STD Occurrence—Especially Syphilis

Key point: Over the past 5 years, rates of syphilis, gonorrhea, and chlamydia have all increased in the United States, with syphilis cases almost doubling and cases of antibiotic-reistant gonorrhea rising.

Citation: Centers for Disease Control and Prevention. 2018 STD Prevention Conference. New CDC Analysis Shows Steep and Sustained Increases in STDs. August 28, 2018. Available at: https://www.cdc.gov/nchhstp/newsroom/2018/2018-std-prevention-conference.html#Graphics. Accessed September 7, 2018.

Every other year, the Centers for Disease Control and Prevention hosts a gathering of top experts and stakeholders in the field of sexually transmitted diseases to discuss the current state of affairs, review the latest research, and make projections about emerging trends (and what to do about them). This year's conference, held in August, included the grim news that rates of syphilis, gonorrhea, and chlamydia have all increased over the past 5 years, with syphilis nearly doubling in that time period. Gonorrhea is up 67%, as well, and chlamydia is more common than at any other time. Total cases of those three infections combined are up 31%, from 1.8 million in 2013 to 2.3 million in 2017.

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Despite its dramatic growth, syphilis is still the third leading STD by total number of diagnoses. While chlamydia is the most common (1.7 million cases) the biggest threat may prove to be from gonorrhea. There were 555,605 confirmed cases of gonorrhea in 2017, but urgent care providers should be aware that the worst news is the CDC is seeing signs that resistance is on the rise—so the threat of untreatable gonorrhea is increasing along with the number of cases. ■

Check Yourself if You're Thinking of Prescribing an Opioid Toward the End of Your Shift

Key Point: Physicians are more likely to prescribe an opioid product in the fourth hour of a clinical session than they are in the first hour.

Citation: Philpot LM, Khokhar BA, Roellinger DL, et al. Time of day is associated with opioid prescribing for low back pain in primary care. *J Gen Intern Med*. July 2, 2018. [Epub ahead of print]

"Decision fatigue" may lead physicians to be more willing to prescribe an opioid pain medication than they'd be at the start of a shift, according to new data published in the *Journal of General Internal Medicine*. While their research centered on patients with low back pain seen by primary care physicians, it echoes the findings of a 2014 study showing that the likelihood of prescribing an antibiotic inappropriately was greater as the clinical day progressed. This newer paper reflects 2,772 visits for low back pain at the Mayo Clinic in Rochester, MN. Overall, 19.8% of patients received a prescription for an opioid in spite of the fact that there's little evidence that opioids are effective

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with low back pain long-term. The doctors in the study were 60% more likely to prescribe an opioid in the fourth hour of a clinical session compared with the first hour of that same session. ■

High Volume Diminishes Quality of Care in Pediatric Emergency Rooms

Key point: "Inappropriate" visits (ie, for relatively low-acuity complaints) to the ED are largely to blame for overcrowding and resultant lower quality of care.

Citation: Haasz M, Ostro D, Scolnik D. Examining the appropriateness and motivations behind low-acuity pediatric emergency department visits. *Pediatr Emerg Care*. 2018;34(9):647-649.

Most children who show up in the pediatric emergency department (PED) have a "regular" pediatrician or primary care physician—but not necessarily access to those physicians at times their parents deem it necessary for the child to see someone immediately, say the authors of a new article published in the journal *Pediatric Emergency Care*. This leads to overcrowding in PEDs and, ultimately, diminished quality of care. Out of 635 patients with a Paediatric Canadian Triage and Acuity Score of 4 or 5, only 25% were found to need truly emergent care at the time of their PED visit. Perceived expertise at the tertiary care hospital and ease of getting test results were the most common reasons (93% and 81%, respectively) for the children to have been brought in. The authors concluded that greater access to physicians outside of "normal" office hours, including testing capabilities, would likely reduce unnecessary trips to PEDs and, as a result, improve the quality of care for all. Though urgent care was not included in the discussion, one can only imagine how the growth of the pediatric urgent care center market in the U.S.—which by its very nature will increase access as described by the authors—might impact future studies of a similar nature. ■

CDC: Less Imaging, More Symptom Scales and Counseling for Kids with mTBI

Key point: New guidelines on assessing and treating children with suspected mild traumatic brain injury apply to providers in all practice settings—including urgent care.

Citation: Lumba-Brown A, Yeates KO, Sarmiento K. Centers for Disease Control and Prevention Guideline on the Diagnosis and Management of Mild Traumatic Brain Injury Among Children. *JAMA Pediatr*. Available at: https://jamanetwork.com/journals/jamapediatrics/fullarticle/2698456. Accessed September 9, 2018.

The Centers for Disease Control and Prevention considered 25 years of research into pediatric patients with mild traumatic brain injury (mTBI) in formulating its new set of guidelines on assessing and treating children who've experience a blow to the head. Ultimately, the CDC team came up with 19 distinct guidelines, which they boiled down into five broad recommendations:

- Do not routinely image patients to diagnose mTBI.
- Use validated, age-appropriate symptom scales to diagnose mTBI.
- Assess evidence-based risk factors for prolonged recovery.
- Provide patients with instructions on return-to-activity customized to their symptoms.
- Counsel patients to return gradually to nonsports activities after no more than 2–3 days of rest.

Perhaps with a nod to the diverse and evolving nature of today's healthcare landscape, the authors emphasize that the evidence-based rules "cover diagnosis, prognosis, and management and treatment…in all practice settings." They also note that there's been a "marked" increase in the number of emergency room visits for mTBI in the past 10 years, with more than 800,000 children presenting to the ED with mTBI annually. ■

Be Vigilant for PE and Arrhythmias in Patients with Syncope

Key point: A pair of studies describe incidence and considerations for cardiac arrhythmias and pulmonary embolism in patients who present with syncope.

Citations: 1. Costantino G, Ruwald MH, Quinn J, et al. Prevalence of pulmonary embolism in patients with syncope. *JAMA Intern Med*. 2018;178(3):356-362. 2. Nishijima DK, Lin AL, Weiss RE, et al. ECG predictors of cardiac arrhythmias in older adults with syncope. *Ann Emerg Med*. 2018;71(4):452-461.

"It is helpful for the urgent care provider to understand that syncope can be a bellwether for near-future, potentially life-threatening events."

Patients who present to the urgent care center with a complaint of syncope are often at a loss to explain whether they experienced any other symptoms. As such, the process of narrowing down the possible causes—and eliminating the most threatening—can be a challenge. Two recent articles published in *JAMA Internal Medicine* and the *Annals of Emergency Medicine* provide clues that it is wise to be vigilant for cardiac arrhythmias, and that the incidence of pulmonary embolism is lower than reported in recent studies.

In considering the prevalence of PE in syncopal patients, Costantino, et al looked at the cases of nearly 1.7 million adults who presented to emergency rooms across four countries with syncope. Prevalence of PE at the time of the ED visit ranged from 0.06% to 0.55% for all patients and 0.15%–2.1% for patients who were hospitalized. Follow-up assessment at 90 days postvisit showed higher rates for both groups (a range of 0.3%–1.37% for nonhospitalized patients and 0.75% to 3.86% for patients who were hospitalized).

In the *Annals* article, researchers sought to identify specific abnormalities in the ECGs of patients ≥60 years of age who presented to 11 emergency rooms with syncope or near syncope. Approximately 3% received a diagnosis of a "serious cardiac arrhythmia not recognized on initial ED evaluation" within 30 days of their ED visit. More specifically, the authors found "the presence of nonsinus rhythm, multiple premature ventricular conductions, short PR interval, first-degree atrioventricular block, complete left bundle branch block, and Q wave/T wave/ST-segment abnormalities consistent with acute or chronic ischemia on the initial ED ECG increased the risk for a 30-day serious cardiac arrhythmia."

Both studies point to the need for the urgent care provider to understand that syncope can be a bellwether for near-future, potentially life-threatening events. This can inform interaction with patients, both in terms of taking a history but also educating patients as to their risk for those events. ■