



ABSTRACTS IN URGENT CARE

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

■ SEAN M. MCNEELEY, MD

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

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

Key point: Another drug interaction with potential deadly consequences.

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

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

this study is a good reminder that it is important to exercise caution when choosing an antibiotic, especially for elderly patients taking spironolactone. ■

Steroids Do Not Necessarily Decrease Allergic Relapses

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

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

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



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Though Cephalosporin Allergies Are Not Common, They Do Occur

Key point: Cephalosporin allergies are uncommon.

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

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

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

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

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

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

Head Lice Treatment Guidelines Updated

Key point: Head lice treatment has advanced, as has advice on when to send a child with head lice back to school.

Citation: Devore CD, Schutze GE; Council on School Health

“No healthy child should be excluded from school after treatment for head lice. ‘No nits’ policies are not helpful.”

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

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

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

Prognostic Value of Troponin

Key point: Another potential role for troponin.

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

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