Generic drug appearance
Rapid strep test sensitivity
NSAIDs and anaphylaxis
Scalp hematomas and brain injury

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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.

Generic medication appearance

Key point: When providing generic prescriptions, warn patients about generic medication colors and shapes.

Citation: Kesselheim AS, Bykov K, Avorn J, et al. Burden of changes in pill appearance for patients receiving generic cardiovascular medications after myocardial infarction: Cohort and nested case–control studies. *Ann Intern Med*. 2014; 161:96-103.

Researchers in this study attempted to determine if changes in color or shape of a generic drug led to discontinuation of that drug. Patients were evaluated in a case control study after having experienced a myocardial infarction and the drugs prescribed included beta blockers, ACE inhibitors, and statins.

Changes in color increased risk of discontinuation 34% whereas a shape change increased risk of discontinuation 66%. Although this may not seem to directly apply to urgent care, if it can be generalized, it shows the importance of physicians and pharmacist warning patients, before a change occurs, that generic medications vary in both color and shape. This may even apply to a short-term medicine like an antibiotic that does not look the same as the one a patient used in the past. It is already known that a large percentage of patients don't fill prescriptions, and an unexpected change in color or shape would likely increase that risk. ■

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Sensitivity of rapid strep tests

Key point: One in 20 adults with negative rapid streptococcus tests still may have strep throat.

Citation: Dingle TC, Abbott AN, Fang FC. Reflexive culture in adolescents and adults with group A streptococcal pharyngitis. *Clin Infect Dis*. 2014;59(5):643-650.

The authors of this study note that clinical and laboratory guidelines differ as to the need for a throat culture in adults with a negative rapid test. They also note that because rheumatic fever and post-streptococcal renal involvement are rare in adults, some clinicians feel that back-up cultures are unnecessary.

In this retrospective study, researchers looked at outcomes in patients older than age 13 with a negative rapid test and subsequent positive throat culture over an 11-year period at a lab in Seattle, Washington. The policy at the referring medical centers was to send cultures on all patients who had a negative rapid test. A total of 726 patients were included who met criteria and for whom applicable visit data were available (297 did not have adequate chart data).

About 5% of the patients proved to have a positive culture after a negative rapid test, compared with 13% who were positive on rapid tests. Therefore, sensitivity was about 75% with the rapid test alone. The authors also noted that 29 of the 726 patients developed abscesses. Several other patients were noted to have other bacterial infections of the throat that improve with antibiotics but for which the rapid strep assay does not test (e.g., Group C streptococcal infections). From an urgent

care perspective, reconsideration of back-up cultures in adults may be needed. Further prospective research, it is hoped, will help answer that question. ■

NSAIDs and anaphylaxis

Key point: Take care with nonsteroidal anti-inflammatory drugs and don't forget the epinephrine.

Citation: Aun MV, Blanca M, Garro LS, et al. Nonsteroidal anti-inflammatory drugs are major causes of drug-induced anaphylaxis. *J Allergy Clin Immunol Pract*. 2014;2(4): 414-420.

In this allergy clinic-based study of patients with previous anaphylaxis, likely causes and treatment were evaluated. A total of 806 patients with drug reactions were screened revealing 117 with anaphylaxis. About three-fourths of the patients with anaphylaxis had an identifiable cause. Nonsteroidal anti-inflammatory drugs (NSAIDs) were identified as the cause in almost half of these cases, which is considered unusual because antibiotics typically are the most frequent cause of anaphylaxis.

The second important finding from this study was that epinephrine use was reported in only one-third of patients. As the authors noted, epinephrine is considered the first-line treatment for anaphylaxis and low use of epinephrine is associated with higher mortality. A final concern was that 66% of patients had already experienced an adverse drug reaction to the medication identified as the cause of their anaphylaxis.

From an acute care perspective, realizing that anaphylaxis is underdiagnosed and epinephrine is underused should keep us vigilant for its symptoms and mindful of anaphylaxis treatment. Many good reviews of the complex diagnosis of anaphylaxis are available, including one in the June 2011 edition of *JUCM*. A second take-home message is that once again, NSAIDs were shown not to be as benign as had previously been thought. ■

Scalp hematomas and brain injury

Key point: Scalp hematomas are still a significant concern for brain injury.

Citation: Dayan PS, Holmes JF, Schutzman S, et al. Risk of traumatic brain injuries in children younger than 24 months with isolated scalp hematomas. *Ann Emerg Med*. 2014(2);64:153-162.

This article reviews the previously reported data from the 2009 Pediatric Emergency Care Applied Research Network (PECARN) including only children up to age 24 months regarding scalp hematomas and significant brain injury. In a review of almost 3,000 cases of patients of younger age, non-frontal scalp hematoma, increased scalp hematoma size, and severe mechanism of injury were independently associated with traumatic brain injury. Of interest, only 50 patients had findings of traumatic brain injury. That reinforces the fact that the number of significant brain injuries is low. For urgent care providers, this report confirms previous studies on this topic. The results also underscore the low prevalence of significant findings in these patients. ■