Antibiotic Rx adherence varies widely in sickle cell care

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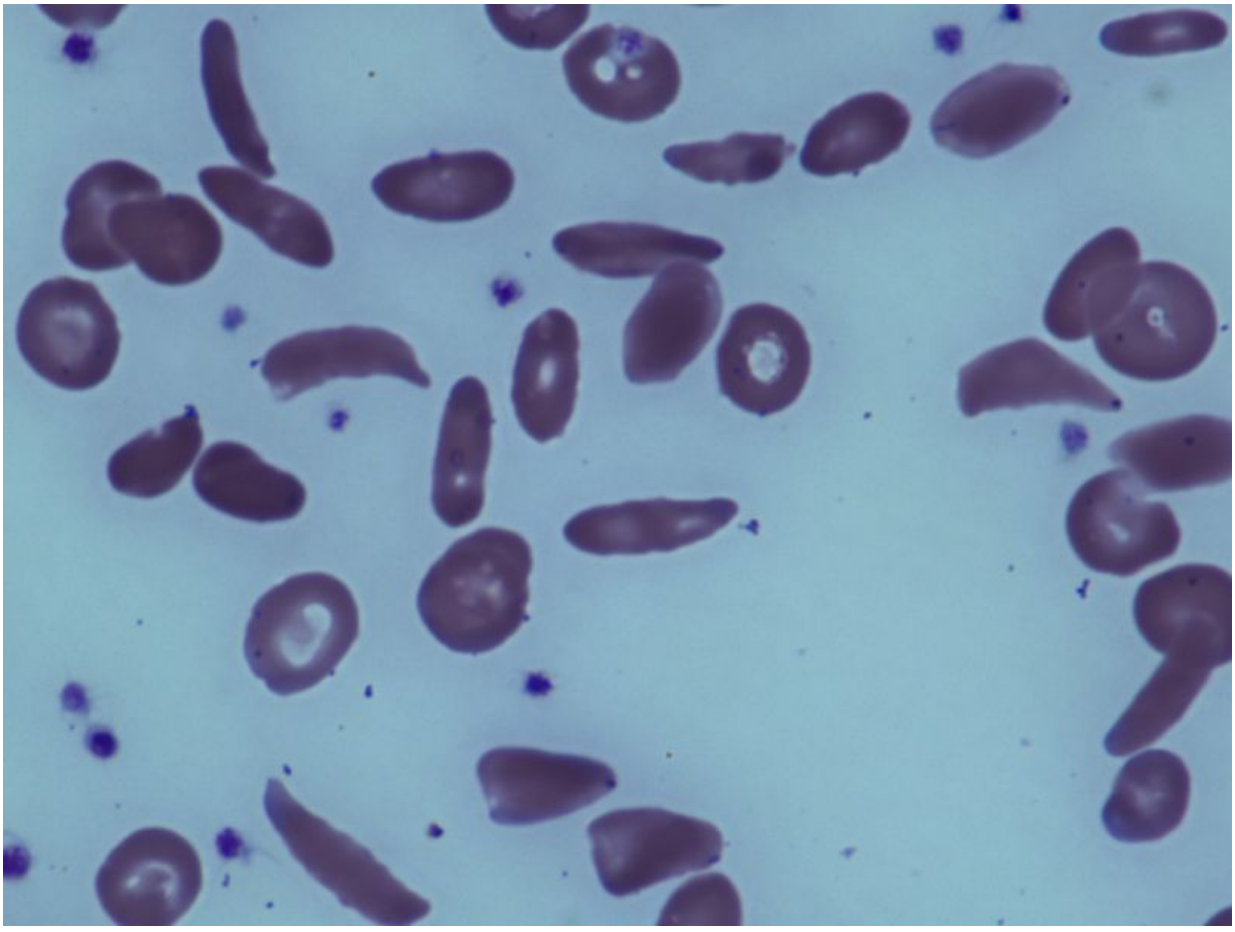

(HealthDay)—Adherence to antibiotic guidelines for acute chest

syndrome (ACS) in children with sickle cell disease (SCD) varies widely, according to a study published online Sept. 11 in *JAMA Pediatrics*.

David G. Bundy, M.D., from the Medical University of South Carolina in Charleston, and colleagues used data from the national Pediatric Health Information System (from Jan. 1, 2010, to Dec. 31, 2016) to retrospectively identify 14,480 hospitalizations in 7,178 children (ages 0 to 22 years) with a discharge diagnosis of SCD and either ACS or pneumonia.

The researchers found that guideline-adherent antibiotics were provided in nearly three quarters (73.6 percent) of hospitalizations for ACS. Guideline-adherent antibiotics were most likely for children aged 5 to 9 years (3,230; 79.8 percent) and least likely for children 19 to 22 years (697; 64.1 percent). Wide between-hospital variation was seen with use of guideline-adherent antibiotics ranging from 24 to 90 percent. Guideline-adherent antibiotic use was associated with lower 30-day ACS-related (odds ratio, 0.71; 95 percent confidence interval, 0.50 to 1.00) and all-cause (odds ratio, 0.50; 95 percent confidence interval, 0.39 to 0.64) readmission rates, compared to children who received other regimens.

"Efforts to increase the dissemination and implementation of SCD treatment guidelines are warranted as is comparative effectiveness research to strengthen the underlying evidence base," the authors write.

More information: Abstract/Full Text (subscription or payment may be required)