Assessing the utility of urine culture testing in febrile infants with bronchiolitis.

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Abstract:
The practice of urinary tract infection (UTI) testing in febrile infants with bronchiolitis is up for debate. Several small studies have shown that the incidence of UTIs approaches the rate of asymptomatic bacteruria in febrile young children with bronchiolitis, while the largest study showed that very young febrile infants with bronchiolitis have a significant rate of UTIs. The purpose of this multicenter study is to investigate whether the incidence of UTIs in febrile infants 2-12 months of age with bronchiolitis is higher than the incidence of asymptomatic bacteruria in similarly aged patients and to attempt to elucidate the risk factors for having a concurrent UTI. We will be prospectively reviewing the medical records of 1500 febrile infants with bronchiolitis 2-12 months of age seen in the emergency departments at 10 centers from November 2012 to April 2013. Eligible patients will be identified by clinicians and consented for participation in the study. Treatment will be per the discretion of the treating attending physician, but study inclusion requires obtaining a urinalysis and/or a urine culture. We will be utilizing direct medical chart review to identify specific laboratory data. Additional data will be abstracted from the medical records if obtained: e.g., wbc, band count, blood culture results, chest radiographs. A follow-up phone call will be conducted on patients who were diagnosed with a concurrent UTI to learn if they had any subsequent UTIs and renal imaging. Data will be abstracted onto RedCap and analyzed using t-test, chi-square analysis and logistic regression.