To assess trends in the duration of intravenous (IV) antibiotics for urinary tract infections (UTIs) in infants ≤60 days old between 2005 and 2015 and determine if the duration of IV antibiotic treatment is associated with readmission” Lewis-de los Angeles et al (2017).

Objectives: To assess trends in the duration of intravenous (IV) antibiotics for urinary tract infections (UTIs) in infants ≤60 days old between 2005 and 2015 and determine if the duration of IV antibiotic treatment is associated with readmission.

Methods: Retrospective analysis of infants ≤60 days old diagnosed with a UTI who were admitted to a children’s hospital and received IV antibiotics. Infants were excluded if they had a previous surgery or comorbidities, bacteremia, or admission to the ICU. Data were analyzed from the Pediatric Health Information System database from 2005 through 2015. The primary outcome was readmission within 30 days for a UTI.

Results: The proportion of infants ≤60 days old receiving 4 or more days of IV antibiotics (long IV treatment) decreased from 50% in 2005 to 19% in 2015. The proportion of infants ≤60 days old receiving long IV treatment at 46 children’s hospitals varied between 3% and 59% and did not correlate with readmission (correlation coefficient 0.13; P = .37). In multivariable analysis, readmission for a UTI was associated with younger age and female sex but not duration of IV antibiotic therapy (adjusted odds ratio for long IV treatment: 0.93 [95% confidence interval 0.52–1.67]).

Conclusions: The proportion of infants ≤60 days old receiving long IV treatment decreased substantially from 2005 to 2015 without an increase in hospital readmissions. These findings support the safety of short-course IV antibiotic therapy for appropriately selected neonates.

Reference:

Thank you to our partners for supporting IVTEAM