Urinalysis is effective for UTIs in younger febrile infants

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(HealthDay)—For febrile infants age 60 days and younger, urinalysis is
highly sensitive and specific for diagnosing urinary tract infections (UTIs), according to a study published online Jan. 16 in *Pediatrics*.

Leah Tzimenatos, M.D., from the University of California, Davis, School of Medicine in Sacramento, and colleagues performed a planned secondary analysis to assess the test characteristics of urinalysis for diagnosing UTIs, with or without associated bacteremia, in febrile infants ≤60 days old. Test characteristics were assessed using two definitions of UTI: growth of ≥50,000 or ≥10,000 colony-forming units (CFUs) per mL of a uropathogen.

The researchers found that 289 (7 percent) of the 4,147 infants analyzed had UTIs with colony counts ≥50,000 CFUs/mL, including 27 (9.3 percent) with bacteremia. A positive urinalysis for these UTIs exhibited sensitivities of 0.94 (95 percent confidence interval [CI], 0.91 to 0.97), regardless of bacteremia; 1.00 (95 percent CI, 0.87 to 1.00) with bacteremia; and 0.94 (95 percent CI, 0.90 to 0.96) without bacteremia. In all groups, specificity was 0.91 (95 percent CI, 0.90 to 0.91). The sensitivity and specificity of urinalysis was 0.87 (95 percent CI, 0.83 to 0.90) and 0.91 (95 percent CI, 0.90 to 0.92), respectively, for UTIs with colony counts ≥10,000 CFUs/mL.

"The urinalysis is highly sensitive and specific for diagnosing UTIs, especially with ≥50,000 CFUs/mL, in febrile infants ≤60 days old, and particularly for UTIs with associated bacteremia," the authors write.

One author disclosed financial ties to the pharmaceutical industry.

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Editorial

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