


50 Years Ago in THE JOURNAL OF PEDIATRICS

Bacteriuria in Children with Acute Febrile Illnesses
North AF. J Pediatr 1963;63:408-11

knowing the prevalence of a particular disease is important. It helps us interpret diagnostic tests and guide treatment. It is even more important when the disease can have long-term complications, such as renal scarring after urinary tract infections (UTI).

In this study, Dr North studied 82 children presenting to either an emergency department or an ambulatory clinic with an acute febrile illness. A clean-catch or catheterized urine sample was obtained in all patients. UTI or “significant” bacteriuria was defined as a positive culture with >100,000 cfu/mL. There were 3 patients with a UTI, 1 with obvious signs and symptoms of pyelonephritis signs and 2 with repeat negative cultures. Two other patients had cultures with >10,000 cfu/mL in clean-catch samples and were considered negative. The author stated that UTI was seldom the cause of acute febrile illness in children.

Although that last statement may cause concern nowadays, this study was possibly one of the first efforts to establish the prevalence of UTI in children. The study population is not representative of today’s epidemiology, and microbiology methods may have changed; however, as shown in a systematic review by Shaikh et al.,1 the prevalence of UTI remains unclear today, and may vary from 2.9 to 13.6 per 100 patients, depending on age and setting.

Another interesting aspect of this article is that even 5 decades ago, doctors were aware of the possibility of urine bag sample contamination. Bags are still used today in some circumstances for reasons of practicality.

All in all, this study raised an important issue of the frequency of UTIs in febrile children. Fifty years later, we still have doubts, but at least we know that we should keep looking for these infections.

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Reference