

## 소아 요로감염 환자의 진단에 있어서 미국 소아과학회 요로감염 지침을 따랐을 때 놓칠 수 있는 환자

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최다민, 임형은, 유기환

### Missing Patients according to the New American Academy of Pediatrics Urinary Tract Infection Guideline

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**Background:** We aimed to evaluate the accuracy of the diagnosis and management algorithms of the new American Academy of Pediatrics (AAP) urinary tract infection (UTI) guideline.

**Methods:** We retrospectively reviewed the medical records of patients with febrile UTIs aging between 2 months and 24 months. The patients were grouped into three; group I, both positive results of urinalysis and urine culture; group II, positive urine culture with negative analysis; and group III, negative culture with positive urinalysis. Clinical and laboratory findings were analyzed among the groups and within the group I.

**Results:** Total 321 infants with febrile UTIs were enrolled. The number of group I, II and III was 289, 31, and 32. There were no differences of the frequencies of hydronephrosis, acute pyelonephritis, vesicoureteral reflux (VUR), renal scar and the recurrence among the three groups. Although the serum levels of C-reactive protein and leukocytes were lower in the group II compared with those of group I and III ( $p < 0.05$ ), they were not different between the group I and III. Within the group I, the frequency of VUR was not different according to the presence of hydronephrosis. However, the presence of the recurrence of UTIs was associated with the frequency of VUR. (recurrence vs. No-recurrence 34.6% vs. 11.3%,  $p < 0.05$ ).

**Conclusions:** Febrile UTIs in infants and young children cannot be ruled out with only one of positive results of urinalysis and urine culture. Recurrence of UTIs may be a reasonable standard of the investigation for VUR.

**Key Words:** 소아요로감염, 방광요관역류, 미국소아과학회  
Urinary tract infection, Pediatric, Imaging