

NEPHROLOGY - I

URINARY TRACT INFECTION AND VESICoureTERIC REFLUX - AN UPDATE

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Abstract: Diagnosing urinary tract infections in young children presents unique challenges due to non-specificity of clinical manifestations and difficulty in collecting urine specimens. Identification of bacteriuria and leukocyturia while providing good diagnostic accuracy, is cumbersome to perform. Current evidence recommends using urine dipstick tests for a presumptive diagnosis of UTI. Most children diagnosed with a UTI can be effectively managed with oral antibiotics. Additionally, the approach to imaging after an initial UTI is becoming less aggressive, largely because there are limited effective interventions to prevent kidney scarring associated with vesicoureteral reflux. Majority of patients with vesicoureteric reflux can be managed without surgical intervention as it tends to resolve spontaneously.

Keywords: Acute pyelonephritis, Antimicrobials, Cystitis, Micturating cystourethrography, Vesicoureteral reflux.

Points to Remember

- Urine dipstick based on leukocyte esterase and nitrite can be used for presumptive diagnosis of urinary tract infections in children.
- Ultrasound scan should be performed in all children following an episode of urinary tract infection; micturating cystourethrography and DMSA scan should be reserved for selected cases.
- Majority of the patients with urinary tract infection can be managed with oral antibiotic therapy
- Antibiotic prophylaxis is effective in preventing recurrence of urinary tract infection only in children with high grade vesicoureteric reflux
- As primary vesicoureteric reflux often resolves spontaneously, majority of these patients can be managed without surgical intervention

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