Urinary Tract Infection in Nigerian Children

F.U.		Eke ^a
N.		Eke ^b

^aNephrology Unit, Department of Paediatrics, and ^bUrology Unit, Department of Surgery, University of Port Harcourt, Nigeria

Dr. F. Eke, Senior Lecturer, Department of Paediatrics, Box 141, Uniport, University of Port Harcourt, Port Harcourt (Nigeria)

Dear Sir,

We studied 426 children aged 1 day to 16 years with symptomatic urinary tract infection (UTI) in Nigeria. UTI accounted for 1.6% of all out- (17,011) and in-patient (9,746) admissions over a 3-year period (1988-1991).

The commonest presenting clinical feature was fever followed by dysuria. Only 1 patient was hypertensive. The commonest organism was *Klebsiella* (25.9%) followed by *Escherichia coli* (25.5%). Antibiotic sensitivity to the commonest organisms was best with the cephalosporins followed by gentamicin, nalidixic acid and nitrofurantoin, and worst with cotrimoxazole and ampicillin.

Intravenous pyelogram (IVP), micturating cystourethrogram (MCU) and ultrasound showed that 23 of 24 patients who had impaired renal function with serum creatinine above 100 µmol/l, had evidence of an underlying renal tract abnormality ranging from congenital lesions like posterior urethral valves (PUV) to acquired lesions like urethral strictures. Underlying renal tract abnormalities were identified in 27 of 93 IVPs (29.3%) that were performed. There was no evidence of vesicoureteric reflux (VUR) in 20 children in whom MCU was performed, although renal scarring was detected in 2 patients. Ultrasound was available to 4 patients only. The commonest renal tract abnormalities were hydronephrosis, 7 (25.9% of 27 abnormalities); urethral stricture, 6 (22.2%), and PUV, 5 (18.5%). Five of 6 cases of urethral stricture were secondary to circumcision, one to a traumatic rupture of the urethra.

The 29.3% rate of underlying renal tract abnormalities is comparable to findings from a study of 640 IVPs at Ibadan, Nigeria [1], but lower than the 40% rate of abnormalities in some British studies [2].

This study suggests that UTI is an important cause of childhood morbidity in Nigeria; that VUR which accounts for 25-33% of infections in schoolgirls in Britain [3] is rare and that there is a need for the prevention of urethral strictures resulting from circumcision.

References

- Ogunbiyi OA, Nzeh D: Intravenous urography in paediatric and adolescent practice. *Nig J Paediatr* 1984;11:107-144.
- Arneill GC, McAllister TA, Kay P: Measurement of bacteriuria by plane dipslide culture. *Lancet* 1973;i:94-95.
- Aggarwal VK, Verrier JK, Asscher AW, Evans C, Williams CA: Covert bacteriuria: Long-term follow-up. *Arch Dis Child* 1991;66:1284-1286.

© 1995 S.KargerAG, Basel
0028-2766/95/0701-0132
\$8.00/0