
Readers' Forum

Circumcision to Prevent Urinary Tract Infection?

Q. *One of the grey areas in the management of urinary tract infection (UTI) is the role of circumcision in its prevention. In this context, the opinion has ranged from "mandatory" to "unwanted". I seek a clarification on this issue.*

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A. The controversy regarding whether to circumcise an infant or not and whether circumcision prevents UTI is undergoing two extremes of opinions like movements of a pendulum.

I would like to quote from two latest articles^{1,2} addressing the issue of circumcision and UTI. Uehling states¹ in male infants foreskin is important in determining urethral flora and circumcision may help reduce the occurrence of UTI because frequency of UTI and bacteremia are significantly higher in uncircumcised boys, especially during the first 6 months of life⁽¹⁾. Despite the above evidence a question still remains about the efficacy of circumcision in prevention of UTI for which a large number of infants will be operated by a procedure with morbidity like bleeding in 0.19% and also UTI in some⁽²⁾. The cost of

operation also needs to be considered. A well defined prospective study will be required to resolve the controversy. Proper foreskin care in uncircumcised boys is important to minimize the risk of, UTI. The various indications of circumcision should be: (i) Obstructive phimosis with straining while passing urine; (ii) Recurrent episodes of pus per urethra with significant phimosis; (iii) Recurrent balanitis; and (iv) Recurrent UTI, when a trial of proper cleansing and antibiotic prophylaxis is unsuccessful. Finally, the practice of circumcision to relieve minor symptoms like excessive crying or straining whilst passing urine should be abolished because the cause of these symptoms may be obstruction higher up (for example, posterior urethral valve) or neurogenic bladder, the diagnosis of which may be missed or delayed.

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2. Leung KC, Robson L. Urinary tract infection in infancy and childhood. In: *Advances in Pediatrics*, Vol. 38. Ed. Barnes LA. Chicago, Mosby Year Book, 1991; pp 257-286.

Q. *What is the experience with the recent anti-kala-azar drug Aminosidine? Can it be used in perinatal kala-azar?*

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A. The recent anti-kala-azar drug, aminosidine (paromomycin), an aminoglycoside antibiotic of 2-deoxy streptomycin sub-group, is isolated from *Streptomyces* sp. It is effective and well tolerated in adult kala-azar in a dose of 12-15 mg/kg/day intramuscularly for 21 days in combination with sodium stibogluconate. Aminosidine combined with sodium stibogluconate has a higher cure rate (76-95%) than aminosidine alone (< 50%)(1,2). The higher cure rate in combination therapy is due to synergistic action(3).

The anti-leishmanial action of aminosidine is thought to be related to misreading of messenger ribonucleic acid(4). The drug which is still under experimental state with significant lower activity with monotherapy than sodium stibogluconate, should not be recommended as a first line agent in children without extensive trials. No trials have been conducted with this drug in perinatal kala-azar, which is a rare entity.

Aminosidine is not marketed in India. One vial contains 500 mg of lyophilized salt corresponding to 350 mg base substance. The drug has been marketed in various other countries for several years for the treatment of bacterial infection.

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