

URETHRAL DUPLICATIONS AND ANTERIOR URETHRAL VALVES*

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Anomalies of the anterior urethra below the sphincter area present with infection, difficult voiding or abnormal genital appearances. Minor degrees of distal urethral duplication are commonly seen in association with hypospadias and are without complications. Posterior duplications have been previously classified¹; they fall into three main categories. There are duplications of the urethra that still allow a single urethral opening on the penis. There is a group of anomalies in which the second urethra appears in a hypospadiac position and the worst of these is the Y duplication in which the posterior duplicated urethra enters into the lowest part of the rectum. The third group includes those patients in whom the second urethra opens in an epispadiac position. Incontinence or infection in the secondary tract is an indication for excision, but this operation should not be undertaken lightly as it is often a complex and difficult procedure.

The Y-duplicated urethra is usually associated with an atretic anterior portion of the urethra so that operation is nearly always mandatory; an extensive urethroplasty is necessary to correct this anomaly.

The presence of a diverticulum or a valve in the anterior urethra is often suggested by the history of perineal or penile swelling and obstructive symptoms. The radiological investigation is particularly important, and this can be either in the form of voiding after an intravenous urogram, a formal micturating cystogram or a urethrogram. Cystoscopy is eventually needed, but it is all too easy to miss the small connecting passage between the normal urethra and the diverticulum itself. A common position for the diverticulum is in the bulb of the urethra. In patients of all ages stones can form within the diverticulum, and the anterior edge of the diverticulum can very easily become valve-like and cause severe obstruction. With modern instruments it is possible to incise this anterior edge thus opening the diverticulum into the urethra itself and ridding the patient of the obstructive element. Provided

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this diagnosis is considered it is unlikely to be missed in the clinical situation. Occasionally because of the size or degree of infection of these diverticula it is necessary to perform a formal urethroplasty procedure in two stages.

REFERENCE

1. Williams DI, Kenawi MM. Urethral duplications in the male. *Eur. Urol.* 1:209, 1975.