



## Case Report

# A Rare Case Report of Urethral Duplication in Male

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## **INTRODUCTION**

Urethral duplication is a very rare condition – only about 200 cases have been described in medical literature..This congenital anomaly is characterized by two urethras, which may be either partial or complete. One urethra is usually normal and the other is an accessory urethra. Accessory urethras may be present dorsal to, ventral to or next to the normal urethra. Rarely, accessory urethras may communicate with the prostatic ducts and seminal vesicles. When the accessory urethra is in the dorsal position, the external meatus can be epispadiac; if in the ventral position, the accessory urethra is usually hypospadiac, and the external urethra can open anywhere from the glans to the penoscrotal junction. The latter may resemble a congenital urethra–perineal fistula. In some patients, the accessory urethra may open into the anal canal or at the anorectal junction; this anomaly is referred to as an H-type fistula rather than an accessory urethra. Rarely, when there is no cutaneous or rectal communication, the accessory ventral urethra may form a cyst.The two duplicated urethras may lie side by side; in these cases, the duplication may be limited to the prostatic urethra.

Urethral duplications can also occur with glandular or complete diphallus. The anomalies associated with urethral duplication are superior vesical fissure, bladder exstrophy, posterior urethral valves, imperforate anus, congenital urethral polyps and megalourethra of both channels. Most patients have no symptoms except for, perhaps, a double stream. Other presentations may be incontinence, urinary tract infections and bladder outflow tract obstruction.

## **AIM AND OBJECTIVE**

Urethral duplication is a very rare condition and here we will be presenting one such case of this rare anomaly i.e. urethral duplication in a male.

## **METHOD**

A 16 year old male came to our side for RGU/MCU with difficulty in micturition for 1 year. There was no history of trauma or operative history.



**FIGURE 1 (RGU) & FIGURE 2: (MCU)** demonstrating a blind ending accessory urethra joining the normal urethra placed dorsally, both opening through a single external meatus.

## RESULT

On clinical examination he had single external urethral meatus. On RGU/MCU two urethra were visualised. One of them ending blindly and lying dorsal to the urethra taking the normal course, joining the urinary bladder normally.

The forms of urethral duplications are completely different in males and females. In males, urethral duplication is classified into three types (Effman's classification)

Type I: blind-ending accessory urethra (incomplete urethral duplication)

IA. Distal—duplicated urethras opening on the dorsal or ventral surface of the penis but not communicating with the urethra or bladder (the most common type)

IB. Proximal—accessory urethra opening from the urethral channel but ending blindly in the periurethral tissues (rare)

Type II: completely patent accessory urethra. It is divided into two parts: A (two meatuses) and B (one meatus)

IIA1 Two noncommunicating urethras arising independently from the bladder

IIA2 Second channel arising from the first and coursing independently into a second meatus (Y-type)

IIB Two urethras arising from the bladder or posterior urethra and uniting into a common channel distally

Type III: accessory urethras arising from duplicated or septated bladders.

## CONCLUSION

Double urethra is a rare anomaly, clinical suspicion and typical feature on RGU/MCU confirms the diagnosis. There are a variety of radiological or endoscopic procedures that can be used to define the anatomy of the urethra. These include micturating cystourethrogram (MCUG), intravenous urography, sonourethrography, nuclear scintigraphy and cystourethroscopy. Voiding cystourethrography and retrograde urethrography should be carried out in lateral projections for visualization of the size, shape and position of the two channels.

## REFERENCE

1. Effmann EL, Lebowitz RL, Colodny AH. Duplication of urethra. *Radiology*. 1976;119:179–85. [PubMed]
2. Wagner JR, Carr MC, Bauer SB, Colodny AH, Retik AB, Hendren WH. Congenital posterior urethral perineal fistulae. A unique form of urethral duplication. *Urology*. 1996;48:277–80. Bates DJ, Lebowitz RL Congenital urethro-perineal fistula. *Radiology* 1995;194:501-4. [PubMed]
3. Lapointe SP, Wei DC, Hricak H, Varghese SL, Kogan BA, Baskin LS. Magnetic resonance imaging in the evaluation of congenital anomalies of the external genitalia. *Urology*. 2001;58:452–6. [PubMed]