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CASE REPORT
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A CASE REPORT ON CONTINENT ISOLATED MALE EPISPADIAS.

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ABSTRACT… Epispadias is a rare congenital anomaly in which the urethral opening is on the dorsal surface of penis. Its incidence is 1 in 117000 newborn males and 1 in 484000 in newborn females. Its etiology is considered as because of failure of medial migration of mesenchyme between the ectodermal and endodermal layers of cloacal membrane due to premature rupture of cloacal membrane. Epispadias often presents as exstrophy epispadias complex, a wide spectrum of abnormalities that consist of classic bladder exstrophy, Epispadias and cloacal exstrophy. This case was not a part of exstrophy epispadias complex and it was an isolated continent epispadias which is extremely rare and it was managed with Cantwell Ransley epispadias repair technique.

Key words: Cloacal Membrane, Epispadias, Exstrophy.

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INTRODUCTION

Epispadias is associated with many coexisting congenital conditions importantly vesicoureteric reflux, exstrophy of bladder, Urinary incontinence and inguinal hernias.[1] Mostly it presents as exstrophy epispadias complex. Incidence of coexisting VUR is 30-75% and of inguinal hernia is 33%. Other less common congenitalissues reported are renal and colorectalanomalies.[2]

Epispadias is usually recognized at birth in male child but in females it may go unrecognized, until the child experiences persistent urinary incontinence after toilet training or urinary tract infections.

Epispadias has vast range of variations on physical examination e.g appears as displaced meatus or as open urethral plate visible on dorsum of phallus in male child while in female child it presents as bifid clitoris and Mons pubis depressed and covered in glabrous skin.[3] Epispadias is a clinical diagnosis but most of the times plain x ray is required to assess orientation of pelvic bones and ultrasonography to assess presence or absence of kidneys and hydronephrosis. Voiding cystourethrogram to assess bladder capacity and vesicoureteric reflux.[4]

Managing Epispadias is a great challenge, its management is mainly surgical involving bladder closure, urethral reconstruction and osteotomies if pubic diastasis is present, further surgery may be necessary to correct complications of initial surgeries or to achieve improved cosmesis or compete continence.[5]

CASE REPORT

In this case study a 27 year male presented with history of upward stream of urine from a abnormally placed urethral meatus since childhood. On examination it was not associated with exstrophy of bladder. On investigations such as ultrasonography there was no renal agenesis or hypoplasia or any hydronephrosis. On voiding cystourethrogram there was no vesicoureteric reflux. Cystoscopy was done to asses bladder capacity which was 300ml with normal ureteric

orifices and no trabeculations. Patient was continent and after his complete evaluation his surgery was planned. Goal of surgery was reconstruction of external genitalia for optimal functional and cosmetics results.

Reconstruction was done through modified Cantwell-Ransley repair involving tubularization of intact urethral plate and transposition of urethra ventral to corpora cavernosa. After repair his catheter was removed after 2 weeks of surgery and patient was followed for 6monthstonotifyanypostsurgicalcomplication.

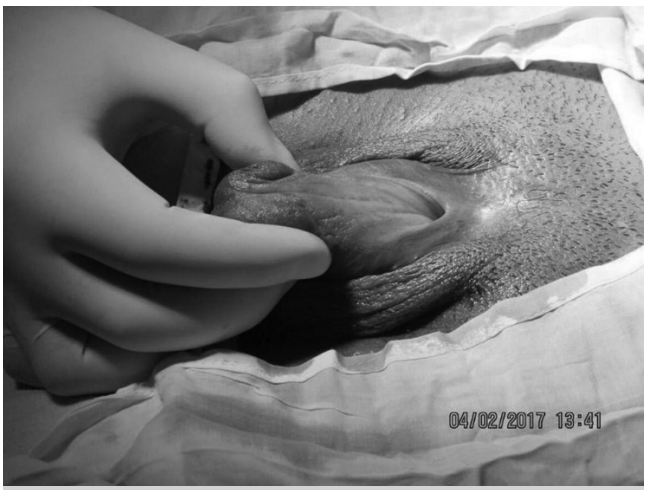

Figure-1. Pre-operative dorsally placed urethral meatus.

Figure-2. Peri-opertaive dorsally placed urethral meatus stay sutures applie.

Figure-3. Mobilization of corporal bodies over foleys catheter.

Figure-4. Post-Operative final appearance after modified cantt well ransley repair.

DISCUSSION

Isolated continent epispadias is a very rare congenital anomaly. Its presentation ranges from an isolate urethral defect to severe bladder exstrophy with concomitant renal, inguinal and colorectal anomalies.

Male and female epispadias has variety of appearances on physical examination. In male child common appearances on examination are in the form of displaced meatus or as open urethral plate. In female epispadias present as bifid clitoris and labia minora poorly developed and terminated anteriorly at clitoris.[6] Diagnosis is clinical and further investigations are required to inquire concomitant abnormalities of bladder, pubic bones and kidneys. Ultrasound demonstrates the details of status of kidneys and voiding cystourethrogram is required for possibility of vesicoureteric reflux. Cystoscopy is needed to know the bladder capacity, condition of ureteric orifices and urethral anatomy.[7] Management goals are case dependent. Majority of cases require correction of VUR and Maintenance of a low pressure system and to achieve urinary continence.

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