



Complete Penile Disassembly for Epispadias Repair in Isolated Epispadias in a Postpubertal Patient: A Case Report

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ABSTRACT

Epispadias is a rare congenital malformation of the male or female urogenital apparatus that consists of a defect of the dorsal wall of the urethra. The extent of the defect can vary from a mild glandular defect to complete defects as are observed in bladder exstrophy, diastasis of the pubic bones, or both (see second image below). Simple epispadias occurs less commonly than the more severe form associated with exstrophy of the bladder. Complete disassembly allows tubularization and ventralization of the entire distal urethra; makes glans and urethral repair independent; separates the 2 corporeal glandular bodies, permitting easier and more complete release of the rotation contributing to dorsal chordee, and improves exposure for corporotomy or dermal grafts. CPD is a safe and highly successful technique for epispadias repair in infants, boys and adults. There is an ongoing concern with the procedure in neonates. The procedure has a satisfactory outcome when performed for isolated epispadias

INTRODUCTION

Epispadias is a rare type of malformation of the penis in which the urethra ends in an opening on the upper aspect (the dorsum) of the penis. It can also develop in females when the urethra develops too far anteriorly. It occurs in around 1 in 120,000 male and 1 in 500,000 female births.⁽¹⁾

Epispadias is an uncommon and partial form of a spectrum of failures of abdominal and pelvic fusion in the first months of embryogenesis known as the exstrophy - epispadias complex.⁽²⁾

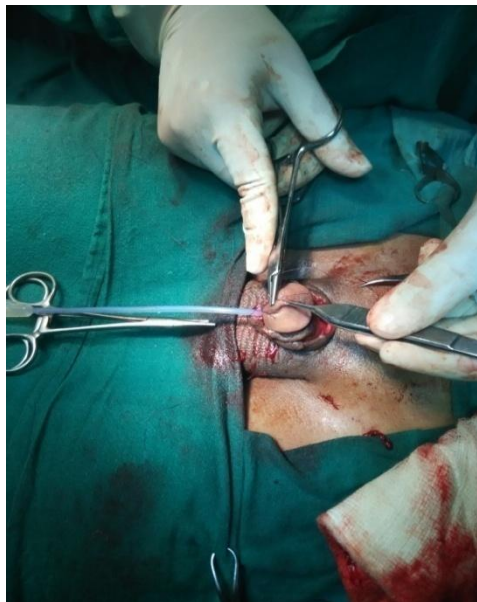
While epispadias is inherent in all cases of exstrophy it can also, much less frequently, appear in isolation as the least severe form of the complex spectrum. It occurs as a result of defective migration of the genital tubercle

primordii to the cloacal membrane, and so malformation of the genital tubercle, at about the 5th week of gestation⁽³⁾

Epispadias can be explained by defective migration of the paired primordia of the genital tubercle that fuse on the midline to form the genital tubercle at the fifth week of embryologic development.⁽⁴⁾

CASE REPORT

A 15 year old boy presented to OPD with complaint of short, wide penis with an abnormal curve and flow of urine from dorsal aspect. Patient was posted for surgery after pre-anesthetic workup



Intra op, After complete penile disassembly, ie full mobilization of the corporeal bodies, neurovascular bundles and urethral plate, reassembly of the penile entities were done. The urethral plate is tubularized and ventralized. The corporeal bodies are straightened and lengthened, joined medially and fixed to the glans cap. The glans is reconstructed. Skin flaps mobilized to give penile cover.

DISCUSSION

Epispadias is a rare congenital malformation of the male or female urogenital apparatus that consists of a defect of the dorsal wall of the urethra. The extent of the defect can vary from a mild glandular defect to complete defects as are observed in bladder exstrophy, diastasis of the pubic bones, or both ⁽⁵⁾. Simple epispadias occurs less commonly than the more severe form associated with exstrophy of the bladder.

Complete disassembly allows tubularization and ventralization of the entire distal urethra; makes glans and urethral repair independent; separates the 2 corporeal glandular bodies, permitting easier and more complete release of the rotation contributing to dorsal chordee, and improves exposure for corporotomy or dermal grafts.⁽⁶⁾

CONCLUSION

CPD is a safe and highly successful technique for epispadias repair in infants, boys and adults.

There is an ongoing concern with the procedure in neonates. The procedure has a satisfactory outcome when performed for isolated epispadias.

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