

One-stage correction of a 160 degree penile torsion associated with chordee and distal hypospadias: Case report

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Summary

Penile torsion exceeding 90 degrees is a rare condition. Correction in an 8 month old boy with a penile torsion of 160 degrees, associated with chordee and distal hypospadias is presented. Surgical management of the torsion was combined with release the chordee and a meatal advancement glanuloplasty (MAGPI) procedure in a one-stage. The details of surgical technique and early result are described.

Key words: Penile torsion, hypospadias, chordee, penis, children

Introduction

Penile torsion is commonly less than 90 degrees and may be associated with hypospadias. This communication aims to present a rare case of penile torsion of 160-degrees associated with distal hypospadias and chordee and its combined management.

Case report

An 8 month old boy was seen at the Konya State Hospital in 1994 for evaluation of penile torsion. The torsion of the penis, that is the plane of frenular/intercorporal section was deviated 160 degrees to the left of the patient. The ventral aspect of the glans which was hypospadiac and deflected with chordee could be viewed from the dorsum (Fig. 1). Further evaluation revealed no other abnormalities. Surgical correction was initiated by making a circumcision just below to the urethral meatus. The penile skin was freed and retracted in sleeve fashion to the

base of the penis (Fig. 2). Detorsion occurred when all adhesions of the skin and investing tissue to Buck's fascia on the shaft was freed. Operation was accomplished with MAGPI procedure (Fig. 3). We did not use urinary diversion. Postoperative period was uneventful and the cosmetic result satisfactory.

Discussion

An embryologic explanation of torsion of the penis can be related to cutaneous factors (1,2). The rotation abnormality occurs usually in counterclockwise direction up to 90 degrees and tends to occur more frequently in patients with hypospadias. But, as in our case, torsion more than 90 degrees is unusual. In the literature, two main methods are described for the surgical management of this abnormality. One of them, described by Culp (2), and Mobley (4) prefers circumferential incision at the base of the penis with derotation and reattachment (2,3,4,5).

In this method, hypospadias and chordee repair followed subsequently as a separate procedure. On the other hand, Klauber (3), and Redman and Bissada (6) advocate distal circumcision incision, which allows the surgeon correction of the associated anomalies either (3,6). It is believed that the abnormality involves skin or dartos along the shaft, and correction should commence with freeing the entire penile skin until detorsion is achieved.

This is best accomplished by an incision just proximal to the glans rather than at the penile base. In our case, we used the distal type incision and accomplished chordee release and hypospadias repair without any difficulty. On the basis of our case, we

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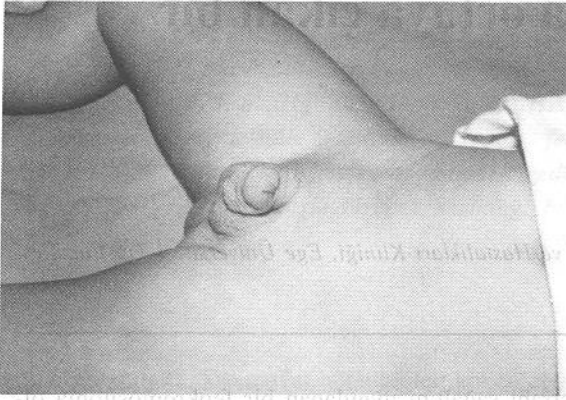


Figure 1. 160- degree penile torsion associated with chordee and distal hypospadias.

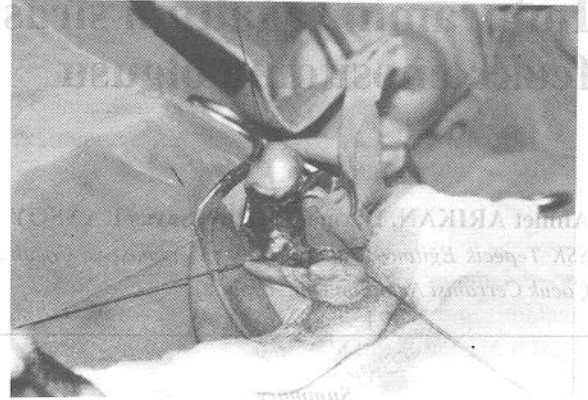


Figure 2. Freeing the entire penile skin to the base of the penis.

agree with those who prefer complete dissection of penile skin because all abnormalities could be corrected by this method in one stage, and the children do not need subsequent correction (3,6).

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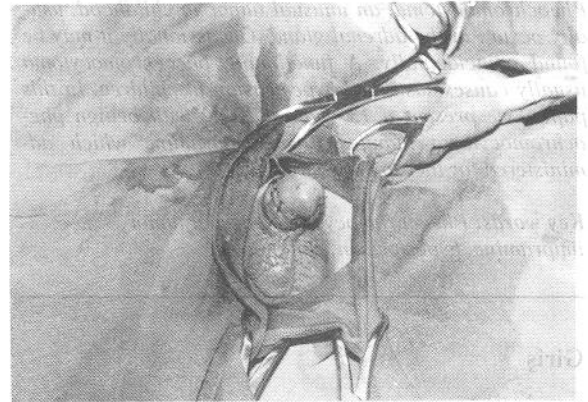


Figure 3. Detorsion, chordee release and MAGPI procedure completed.