

## **PENILE HYPOSPADIAS WITH CHORDEE REPAIR: A NOVEL ONE-STAGE TECHNIQUE**

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**Introduction and aims:** One stage penile hypospadias with chordee repair is not infrequently related to late complications (urethral bulging or stricture) with the established reconstructive techniques. Many surgeons avoid the use of preputial skin tubular flap or graft preferring extragenital skin or buccal mucosa grafts repair in two stages. The presented novel technique is based on the principles of well established methods of urethra stricture repair intending to minimize long term complications.

**Patients and method:** Eight patients 12-37 years old (median=18) with penile hypospadias and chordee, with a history of failed repair were operated with the one-stage technique described below, during the last 15 months. A perineal urethrostomy or a suprapubic cystostomy is applied. After chordee removal and ventral curvature correction, urethroplasty is performed with a strip of preputial skin graft anchored on the ventral surface of the corpora in continuity with the existing urethra. Another preputial island skin flap, applied over the graft around a silicon fenestrated tube-stent forms the neo-urethra which is additionally covered with Byar's skin flaps. The operation is completed with a slightly compressive penile dressing.

**Results:** The recovery was uneventful, except in one case where wound infection was followed by a wide urethrocutaneous fistula, repaired four months later. During the short-term follow-up penile shape, urethral patency, urinary flow and patient satisfaction were more than optimal and long term results are expected.

**Conclusion:** The presented novel method corrects hypospadias in one stage and offers an anatomically and functionally normal penis. The application of preputial graft and flap in neo-urethra formation is expected to combine the advantages of established urethroplasty methods (preputial dorsal on-lay graft and preputial island flap in anterior urethra stricture repair) and hopefully will minimize complications of one-stage procedures, like urethral bulging and stricture.