

One-stage Surgical Correction of Proximal Hypospadias

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Abstract

Introduction: Proximal hypospadias poses major problems in surgical correction owing to the complexity and severity of the abnormalities, leading to the use of staged repairs to correct this condition. However, with precise definition of the components of this deformity a single-stage operation can be developed and applied successfully for surgical correction of this condition. **Materials and Methods:** Twenty-six patients with severe proximal hypospadias were subjected to a one-stage repair. Excision of proximal fibrotic dartos tissue and removal of dysplastic urethral plate tissue corrected chordee completely. Urethral reconstruction was then performed by tubularising a flap of dorso-lateral preputial skin which was then anastomosed to the proximal urethra. The glandular part of the urethra was reconstructed using the distal part of the flap as an onlay graft over the meatal groove. The suture lines were covered with a layer of dartos tissue and skin closure was completed by transposing dorsal skin to surface the ventral penile shaft. A urethral catheter was left in for 10 days. **Results:** All patients have been followed up after surgery from 1 to 5 years with a median period of 2 years. There were no fistulas. Two patients had mild stenosis at the meatus which responded to dilatation. One patient developed a stricture at the proximal anastomosis which required secondary correction. All other patients achieved satisfactory correction, both in terms of voiding and in the cosmetic appearance of the genitalia. **Conclusion:** Single-stage repair of hypospadias can be successfully applied in the correction of severe proximal hypospadias. It requires meticulous dissection and careful design of reconstructive techniques. The end results are comparable to staged procedures and morbidity is significantly lower.

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