

PP-12 Pre-Operative Testosterone Injection Before 2-Stage Repair Of Severe Hypospadias
Improves Penile Biometry And Reduces Glans Dehiscence

Poster Bildiri

Dr Vvs Chandrasekharam¹, Dr Khyati Kiran Janapareddy¹, Dr R Satyanarayana¹, Dr Jamir Arlikar¹

1 Ankura Hospital For Women And Children

Purpose To compare the outcomes of 2-stage repair of severe hypospadias with the selective use of preoperative testosterone stimulation (PHS) in patients with small glans width. **Methods** Children with severe hypospadias and chordee >30degree were divided into 2 groups based on the initial glans width. Group 1 (initial glans width <12mm) received 2 doses of intramuscular testosterone injections before surgery. Group 2 had initial glans width 12mm or more and did not receive PHS. All children underwent 2-stage Byars operation with division of urethral plate to correct the chordee in stage 1. The result of PHS on glans width in group 1 and the outcomes of surgery were studied in both groups. **Results** Seventy-four children operated by a single surgeon were included, of whom 44 (59%) with small glans ($p<0.001$) received PHS (group 1). A posterior meatal location was significantly associated with a small glans (86% vs 42%, $p=0.0002$) and associated undescended testis (UDT, $p=0.031$). In 37/44 (84%) patients, there was a significant increase ($p<0.001$) in glans width after PHS (responders), with the final glans width comparable with group 2 ($p=0.313$). In 7/44 (16%) patients, there was no significant increase in glans width after PHS (non-responders). At a median follow-up of 18 months, 2-stage Byars operation had 86% success, with 8% reoperation rate. There was no difference in success ($p=0.940$) or complications ($p=0.804$) between both the groups. The PHS non-responders with small glans had significantly higher glans dehiscence rate (28%) than those children with larger glans (3%, $p=0.004$). Sixteen children (21%) also had undescended testis (UDT); a nonpalpable UDT was associated with significantly higher risk of karyotype abnormality (60% vs 0%, $p=0.004$). **Conclusions** The use of PHS in selected cases of severe hypospadias before 2-stage Byars operation resulted in significantly increased glans width without any increase in the complication rate. A small glans increased the risk of glans dehiscence. The 2-stage Byars operation seems to be a good option for repair of severe hypospadias, with good success and acceptable complications. Karyotyping in severe hypospadias may be reserved for those with associated nonpalpable UDT.

Keywords: Testosterone injection, severe hypospadias, 2 stage hypospadias repair