

The Impact of Urethral Plate Width on Surgical Outcomes After Distal Hypospadias Repair in Children

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Abstract : Nowadays, there is no consensus about the influence of urethral plate (UP) width on the surgical outcomes after distal hypospadias repair. The purpose of the research was to study the association between UP width and surgical outcomes after distal hypospadias repair in children. Materials and methods: The study included 138 patients with distal hypospadias. The mean age at the time of surgery was 4.6 years (6 months - 16 years). We measured UP width at the "midpoint within the glans" and used the HOSE scale to assess postoperative outcomes. The patients were divided into 2 groups: group 1 - the patients (107) with UP < 8mm, group 2 - patients (31) with UP > 8mm. All boys underwent TIP repair. Preincision means UP width after incision means UP width, and the UP ratio was analyzed. Statistical data were obtained using Statistica 10. Results: The findings were preincision mean UP width - 5.4 mm and 9.4 mm; after incision mean UP width - 13mm and 17.5 mm; UP ratio - 0.41 and 0.53 in group 1 and group 2, respectively. Most postoperative complications (fistula, meatal stenosis, and stricture) happened in patients with UP width < 8 mm versus \geq 8 mm (7/107 versus 2/31, respectively). HOSE results were 15.77 (group 1), 15.65 (group 2). The follow up lasted up to 12 months. Statistical analysis proved the absence of correlation between UP width and postoperative complications. Conclusions: In conclusion, it should be noted that the success of surgical repair mostly depended on the surgical technique.

Keywords : children, distal hypospadias, tip repair, urethral plate width

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