

Stenting versus Non-Stenting with Combined Use of Mathieu and Incised Plate Technique for Repair of Distal Hypospadias

Introduction and Objectives: To evaluate the results and complications after using stenting and non stenting with combined use of Mathieu and incised plate technique for management of distal hypospadias.

Materials and Methods: There were 63 patients with distal penile hypospadias who were operated on using Mathieu technique combined with deep urethral plate incision (Snodgrass technique). Each patient was evaluated according to the site of original urethral opening, original urethral stenosis, the presence and degree of chordee. The operative and postoperative results and complications were reported. Follow-up of patients occurred after one week and after 3 weeks postoperatively. Then, every month for at least one year.

Results: There were 63 patients involved and operated on in this study. At the end of operation, they were divided into two groups: stented and non stented patients. Group 1 was 33 stented patients and group 2 was 30 non stented patients with a mean age 46 ± 16.6 months in group 1 versus 42.8 ± 16.1 months in group 2. Group 1 has no bleeding versus one case in group 2 (p value 0.1). Urinary tract infection reported in two cases in group 1 versus three cases in group 2 (p value 0.4). No retention occurred in both groups and extravasations reported in one case in non stenting group (p value is 0.1). Forcible slippage of stent occurred in one case in group 1 (p value 0.14). Painful micturation, meatal stenosis and urethrocutaneous fistula occurred in 11.2 and one case in group 1 versus 5.5 and three cases in group 2 (p value is 0.009, 0.02 and 0.04). No urethral stenosis was reported in both groups of patients.

Conclusion: Combined use of Mathieu and Incised Plate Technique is suitable for distal hypospadias with original meatal stenosis. According to our results we preferred to use the stenting technique to minimize complications of the catheterless technique.