



Paper 3

Distal hypospadias repair: Comparative study between snodgrass and transverse preputial onlay flap

Hesham Abdel-Azim El-Helaly, Hamada Ahmed Youssef, Hamdy Mohamed Ibrahim, Hussein Abdel-Hameed Aldaqadossi, Osama Mostafa Abdalla, **Mohamed Mahmoud Dogha ***

Summary

Introduction

Distal hypospadias repair has several operative strategies such as tubularized incised plate (TIP); Transverse preputial onlay flap (TPOF) and Modified Mathieu Procedure.

The aim of our work is to compare between TIP and TPOF techniques in the outcome. Material and method We conducted this comparative study on 66 patients with different types of distal hypospadias divided in two groups A and B for TIP and TPOF respectively. We reported outcome and complications for both TIP and TPOF repair.

Our results revealed mean operative time was significantly higher in group B (123.1 \pm 6.8 min) than in group A (93.73 \pm 3.9 min, P value < 0.001). Postoperative urinary fistula was reported in group A (15.2%) while no fistula in group B (p value Z 0.05). The vertical slit appearance of meatus was better in group A (54.5%) than in group B (24.2%, P value 0.023). As regard to hypospadias objective scoring evaluation (HOSE) (Summary Figure) the meatal shape score was higher in group A (1.55 \pm 0.51) than in group B (1.24 \pm 0.44, p value Z 0.01), the urinary stream score was significantly higher in group A (1.82 \pm 0.39) than in group B (1.97 \pm 0.17, p value Z 0.04) and the urinary fistula score was significantly higher in group A (3.79 \pm 0.60) than in group B (4 \pm 0, p value Z 0.04).

Discussion

Complications are more common after TIP than in TPOF. As regard the meatus shape, the naturally looking vertical slit like meatus was achieved more in the TIP than in TPOF. We advocate further studies with a large number of patients with a long follow up period.

Conclusion

TPOF is a great option to consider in cases of distal hypospadias because it is an effective technique for primary distal hypospadias repair with a good cosmetic outcome and a low associated complication.

Publication: Journal of Pediatric Urology, Available online 20 August 2022, <https://doi.org/10.1016/j.jpuro.2022.08.01>