Distal Hypospadias Repair Using Only Glans Wing Mobilization and Approximation

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INTRODUCTION: Since its first description in 1994, tubularized incised plate (TIP) technique has become the most commonly performed hypospadias procedure and involves incision of the urethral plate with subsequent tubularization. Glans wings are then developed to cover the neourethra, thereby creating a cosmetically appealing repair. In some distal hypospadias cases, mobilization and approximation of glans wings is sufficient to create a normal appearing urethral meatus.

MATERIALS AND METHODS: A retrospective chart review of all pediatric urology patients who underwent hypospadias repair by a single surgeon at the University of Kentucky between July 1, 2010 and April 1, 2013 was performed. Of the 46 patients who underwent one-stage distal hypospadias repair during that time, we performed the technique described above on 13 patients with amenable anatomy. Patients were evaluated for functional and cosmetic outcomes as well as complications at subsequent office visits and via telephone.

RESULTS: Patients who underwent distal hypospadias repair with our technique had excellent functional and cosmetic outcomes analogous to those who underwent standard TIP repair. The only major complication in the study group was wound dehiscence in one patient that was required a second surgery. All other patients had excellent cosmetic and functional results without fistula formation, strictures or diverticuli, and with excellent parent satisfaction.

CONCLUSIONS: Perceived benefits of this technique include simplicity and rapidity of technique, applicability to glanular, coronal and subcoronal hypospadias, and avoidance of sutures between urethra and glans with potential decrease in meatal stenosis.