Short Communication

Technical tip: Identifying the boundaries of the urethral plate in TIP Urethroplasty

Pauline McGee*, Matthew Hough

Department of Plastic Surgery, Ninewells Hospital, Dundee, DD1 9SY, UK

A R T I C L E  I N F O

Article history:
Received 31 January 2017
Accepted 16 February 2017
Available online 9 March 2017

Keywords:
Hypospadias
Paediatric urology
Paediatric plastic surgery
Urethroplasty

Hypospadias is one of the most common congenital birth defects occurring in approximately 1 in 300 live male births. Corrective surgery aims to correct the position of the urethral meatus forming a slit like meatus in the glans. Tubularized Incised Plate Urethroplasty originally described by Snodgrass in 1994 has been shown to be effective in treating distal hypospadias and associated with a low rate of complications (4%). It is the most commonly performed operation for distal and mid penile shaft hypospadias and the preferred technique by the senior author. Delineating the boundaries of the urethral plate and therefore the incisions for creation of the neo-urethra is often challenging as the boundary between plate and glans may be indistinct. The senior author uses ChloraPrep® with tint routinely for pre-operative skin preparation. The product contains chlorhexidine gluconate 20 mg/ml, Isopropyl Alcohol 70% mg/ml, purified water and Sunset Yellow (E110) tint which stains the skin an orange colour to demonstrate the area that has been cleansed. We have found that the urethral plate stains a more intense shade of orange than the surrounding tissue and thus highlights the incision for the neo-urethra. We present a very simple method of identifying the boundaries of the urethral plate which may be incorporated into standard pre-operative preparation and as such does not add any additional operative time to the TIP Urethroplasty (Figures 1 and 2).

* Corresponding author. Department of Plastic Surgery, Level 5, Ninewells Hospital, Dundee, DD1 9SY, UK.
E-mail address: paulinemcgee@nhs.net (P. McGee).

http://dx.doi.org/10.1016/j.jpra.2017.02.002
2352-5878/© 2017 The Author(s). Published by Elsevier Ltd on behalf of British Association of Plastic, Reconstructive and Aesthetic Surgeons. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).
Figure 1. Pre-operative photograph.
Conflicts of interest statement

None.

References