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Technical tip

McGee, Pauline; Hough, Matthew

Published in: JPRAS Open

DOI:

10.1016/j.jpra.2017.02.002

Publication date: 2017

Licence: CC BY-NC-ND

Document Version Publisher's PDF, also known as Version of record

Link to publication in Discovery Research Portal

Citation for published version (APA): McGee, P., & Hough, M. (2017). Technical tip: Identifying the boundaries of the urethral plate in TIP Urethroplasty. JPRAS Open, 12, 44-46. https://doi.org/10.1016/j.jpra.2017.02.002

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JPRAS Open

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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

ARTICLE INFO

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.¹ Tubularized Incised Plate Urethroplasty originally described by Snodgrass in 1994² has been shown to be effective in treating distal hypospadias and associated with a low rate of complications (4%).¹³ It is the most commonly performed operation for distal and mid penile shaft hypospadias⁴ 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.⁵ 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).



Figure 1. Pre-operative photograph.



Figure 2. Intraoperative photograph following cleansing of the skin with Chloraprep®, note urethral plate stained orange.

Conflicts of interest statement

None.

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