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VIDEOABSTRACT

VIDEOSURGERY

Video can be found at https://ceju.online/journal/2023/Penile-Urethrostomy-urethral-stricture-Reconstructive-Surgery--2305.php

Penile urethrostomy for recurrent long-segment strictures of the penile urethra: step-by-step surgical technique

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In cases of recurrent long-segment urethral strictures (US), the minimally invasive variant of a perineal urethrostomy can be offered as an alternative to an augmentation urethroplasty. Patients who do not desire extensive urethral reconstruction or are unable to undergo a long surgery are ideal candidates for this surgery. The main disadvantage of perineal urethrostomy is that patients can subsequently urinate only while sitting. However, some males have a strong desire to keep voiding standing. For this group of patients and under the condition that the stricture is located only along the penile urethra, a penile urethrostomy may be offered.

In this video, we present step-by-step description of the surgical technique of a penile urethrostomy as an independent surgery, not as part of a staged urethroplasty.

In the current case, a 51-year-old patient with a long penile US after numerous previous surgeries desired a definite solution without the use of any graft. Due to his strong desire to keep voiding in a standing position, he opted for a penile urethrostomy.

A method of localizing the proximal margin of the US is to insert a 4 Fr. ureteral occlusion catheter (Urotech®) deep into the bulbar urethra, block it with 3 cc of saline, and gently pool it back until resistance is encountered.

An inverted u-shaped fasciocutaneous flap is raised at this level, and the penile urethra is dissected.

Between stay sutures the ventral side of the healthy urethra is longitudinally incised. An opening should be made in the urethra at least 3 cm long to create a wide urethrostomy.

Optionally, the proximal urethra may be calibrated with a 30 Fr. bougie, especially when the preoperative urethrogram is inconclusive.

The urethrocutaneous anastomosis is performed using interrupted 3.0 polyglactin (Vicryl™) sutures. It is crucial to incorporate the skin, the urethral mucosa, and the adventitia of corpus spongiosum separately in these anastomosis sutures to achieve better haemostasis without compromising the blood supply within the periurethral spongy tissue.

This step may be modified by first placing a running suture 4.0 polydioxanone (PDS™) connecting the urethral mucosa with the adventitia of the corpus spongiosum on each side before approximating the skin. This technique should be preferred in cases of excessive bleeding to allow better visualization.

In cases where the penile urethrostomy is created in the penoscrotal junction, attention should be given to a tension-free reconstruction of the skin without changing the preoperative level and

angle of the penoscrotal junction, allowing urination in a standing position without wetting the patients' scrotum and with a pleasing aesthetic result.

A 16 Fr. silicone Foley catheter is inserted into the bladder and remains in place for 7 days.

Concluding, penile urethrostomy is a straightforward procedure with a satisfactory aesthetic outcome, which could be considered an equivalent alternative to perineal urethrostomy for patients with penile US who wish to keep voiding while standing.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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