



Robotic-assisted Laparoscopic Subtrigonal Inlay of Buccal Mucosal Graft for Treatment of Refractory Bladder Neck Contracture

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OBJECTIVE

To describe a novel surgical technique for reconstruction of a case of refractory bladder neck contracture (BNC) using a robotic-assisted laparoscopic (RAL) transvesical approach for subtrigonal inlay of buccal mucosal graft. BNC is a well-described yet uncommon adverse event after BPH surgery. Endoscopic management is successful in many patients but refractory cases may require reconstructive surgery.

MATERIALS AND METHODS

A 70-year-old male presented with a history of prior photovaporization of the prostate 2 years prior to our initial consultation. He developed a refractory BNC that did not resolve after multiple endoscopic interventions. For definitive treatment of the BNC, he underwent RAL repair with subtrigonal inlay of buccal mucosal graft. The surgical approach is demonstrated in our video.

RESULTS

The patient underwent RAL subtrigonal inlay of buccal mucosal graft without intraoperative complication or need to convert to an open procedure. The graft harvested for repair measured 5 × 5 × 4 cm. He was discharged home on postoperative day 2. Urethral catheter was left in place for 2 weeks and suprapubic catheter was removed 4 weeks postoperatively. Voiding cystourethrogram at time of suprapubic catheter removal demonstrated no evidence of obstruction or extravasation. Uroflow qmax improved from 2 to 27 mL/s. Postvoid residual urine volume improved from 200 to 3 mL. At last follow-up, there was no evidence of recurrence.

CONCLUSION

Refractory cases of BNC can be successfully managed with reconstructive surgery. In this case report, we describe a novel technique for RAL reconstruction with subtrigonal inlay of buccal mucosal graft. UROLOGY 130: 209, 2019. © 2019 Elsevier Inc.



The video related to this article can be found online at: [doi:10.1016/j.urology.2019.02.048](https://doi.org/10.1016/j.urology.2019.02.048).

EDITORIAL COMMENT



There is a danger with new technologies of applying them overzealously or of seeing every condition as a nail because one knows how to use a hammer. But when it comes to the application of minimally-invasive robotic surgery in the realm of urologic reconstruction, there is a growing body of work that is encouraging for the role of robotics in this subspecialty. In an

area that many times can involve morbid incisions leading to still suboptimal visualization or access to already-altered and often fibrotic anatomy, the use of robotic surgery may be a natural fit by allowing access to tight and narrow spaces with magnification, light, and miniature dexterous instruments. This is demonstrated nicely in the video whereby visualization of the furthest point of dissection at the prostatic apex would be difficult with open surgery, let alone suturing in this tight space. While the need for a buccal graft here is debatable given that trigonal advancement flaps (or Y-V plasty) have already been successfully performed robotically, the authors show how readily this can be performed and are to be congratulated for combining their expertise in reconstruction with robotic technology.

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