



## Transluminal approaches to vesicorectal fistula repair

Marcos Tobias-Machado, Pablo Aloisio Lima Mattos, Cesar Augusto Braz Juliano, Renato Meirelles Mariano da Costa Jr, Roberto Vaz Juliano, Antonio Carlos Lima Pompeo

*Section of minimally invasive surgery, Department of urology, ABC Medical School, Santo André, São Paulo, Brazil*

### INTRODUCTION

Vesicorectal fistula is a devastating postoperative complication after radical prostatectomy. Definitive treatment is difficult. Despite many options, currently there is not one universally accepted approach.

### OBJECTIVES

We describe two new minimally invasive approaches for the repair of vesicorectal fistula.

### METHODS

We treat two patients with vesicorectal fistula after radical prostatectomy. In the first case, we perform the repair using Transanal Minimally Invasive Surgery (TAMIS) with standard laparoscopic instrumentation. We use Alexis device for transanal access, one rigid 10mm port for 0 degree endoscope and two minilap 3mm ports for surgical manipulation. The surgical steps were: Cystoscopy and implant of guide wire on fistula; Positioning; Transanal access; Identification of the fistula; Dissection;

Closure of vesical wall; Injection of fibrin glue in the defect; Closure of rectal wall. In the second case, we perform the repair using Transvesicoscopic Surgery. We use one rigid 10mm port for 0 degree endoscope and two 5mm ports for surgical manipulation. The surgical steps were: Positioning; Transvesical access; Identification of the fistula; Dissection; Closure of rectal wall; Closure of vesical wall.

### RESULTS

Mean operation time was 225 minutes, with a time of surgery slightly higher in TAMIS. The time of dissection was similar (120 minutes). No perioperative complications and conversion were observed. Hospital stay was 2 days and the catheters were removed at 4 weeks. No recurrence was observed.

### CONCLUSIONS

The greatest difficulties were maintaining luminal dilation, instrumental manipulation and suturing. Nevertheless, these new approaches are feasible, with low morbidity.

### ARTICLE INFO

Available at: [www.brazjurol.com.br/videos/march\\_april\\_2014/tobias\\_machado\\_283\\_284video.htm](http://www.brazjurol.com.br/videos/march_april_2014/tobias_machado_283_284video.htm)

Int Braz J Urol. 2014; 40 (Video #6): 283-4

Submitted for publication:  
December 01, 2013

Accepted after revision:  
January 30, 2014

**Correspondence address:**

Pablo Aloisio Lima Mattos, MD  
Rua Veridiana, 115 / 13  
São Paulo, SP, 01238-010, Brazil  
Fax: +55 11 3996-0045  
E-mail: palmattos@hotmail.com

**EDITORIAL COMMENT**

The video by Machado and colleagues nicely depicts two different minimally invasive approaches for the treatment of rectovesical fistulae. Repair of these fistulae can be quite challenging, especially if the defect is large or if the tissues were previously irradiated. Transanal surgeries are becoming more widespread as equipment and surgeons' experience has improved (1). Transvesi-

cal surgery has slowly been adopted for various conditions including simple prostatectomy, vesicovaginal fistula repair and ureteral reimplantation (2). Endoscopic treatment of a rectovesical fistula was reported in 2010 using small clips and tissue glue (3). The potential benefits of these less invasive approaches include less pain and shorter recovery. These new techniques must be compared to traditional surgery and we look forward to additional reports from the authors (4).

**REFERENCES**

1. Kunitake H, Abbas MA: Transanal endoscopic microsurgery for rectal tumors: a review. *Perm J.* 2012; 16: 45-50.
2. Gözen AS, Teber D, Moazin M, Rassweiler J: Laparoscopic transvesical urethrorectal fistula repair: a new technique. *Urology.* 2006; 67: 833-6.
3. Mangiavillano B, Pisani A, Viaggi P, Arena M, Opocher E, Mangano M, et al.: Endoscopic sealing of a rectovesical fistula with a combination of an over the scope clip and cyanoacrylate injection. *J Gastrointest Oncol.* 2010; 1: 122-4.
4. Hadley DA, Southwick A, Middleton RG: York-Mason procedure for repair of recto-urinary fistulae: a 40-year experience. *BJU Int.* 2012; 109: 1095-8.

*Hubert Swana, MD*  
*Pediatric Urology*  
*Nemours Children's Hospital Orlando*  
*Orlando, FL, USA*  
*E-mail: hswana@nemours.org*