

# Laparoendoscopic Single-site Repair of Retrocaval Ureter Without any Special Devices

Rafael B. Rebouças, Rodrigo C. Monteiro, Porfírio F. de Medeiros Júnior, Antônio C. Madruga Neto, Marcos M. Soares Junior, Camila N. Guedes, Rícia N. P. Moura, Geraldo Camilo Neto, Gustavo M. C. de Alencar, Giácomo F. Souza, Cesar A. Britto

Department of Urology, Edson Ramalho Military Police Hospital, João Pessoa, PB, Brazil

# INTRODUCTION

The retrocaval ureter is a rare congenital anomaly. The extrinsic compression may be responsible for obstruction and pain symptoms. The laparoscopic approach has been used with good results and less morbidity than the open surgery. Herein we describe a case of retrocaval ureter treated with LESS. To our knowledge, this represents the second such case reported in the literature, and the first without using any special devices, such as, single port or bended instruments.

#### PRESENTATION

Female, 23 years, complaining of right low back pain for a long time and recurrent urinary tract infection. Renal ultrasound demonstrated right-sided hydronephrosis and intravenous urography suggested the presence of retrocaval ureter. DTPA renal scintigraphy confirms delay in the elimination of contrast through the right kidney. A laparoendoscopic single-site repair was planned.

The patient was placed in rightside-up modified flank position. A semicircular intra-umbilical incision was made and the conventional trocars (one 10 mm and two 5 mm) were inserted through the same incision on different

points of the aponeurosis. The colon was dissected medially and the proximal ureter lateral to the vena cava was identified and dissected. An extra corporeal repair with Vycril 2-0 was used to facilitate the ureteral dissection and the anastomosis. A segment of ureter was ressected due to the tortuosity. Two 4-0 Vycril sutures were used to perform a running anastomosis. An ureteral stent was placed after the posterior layer on an antegrade fashion. A suction drain was left through the umbilicus.

### **RESULTS**

The total operative time was 145 min. The blood loss was minimal. The patient was discharged on the third postoperative day and resumed total activity about 10 days after surgery. The double J was removed within 4 weeks.

### DISCUSSION

Albeit technically challenging, LESS repair for retrocaval ureter might represent a feasible new treatment option for this rare anatomic anomaly. Special devices could help on the procedure, however they are not essencials.

### **ARTICLE INFO**

Available at: www.brazjurol.com.br/videos/january\_february\_2013/Reboucas\_141\_142video.htm

Int Braz J Urol. 2012; 39 (Video #1): 141-2

Submitted for publication: December 10, 2012

Accepted after revision: January 12, 2013

**Correspondence address:** 

Dr. Rafael B. Rebouças
Urology Department,
Edson Ramalho Military Police Hospital
Eugênio Lucena Neiva, s/n - Treze de Maio
João Pessoa, PB, 58.025-020, Brazil
E-mail: rafael.reboucas@gmail.com

### **EDITORIAL COMMENT**

In the video by Dr. Rebouças and colleagues, a less (laparoendoscopic single site) technique for retrocaval ureter repair was nicely illustrated. This will be the second case reported in the literatura, after Autorino and collegues in 2010 (1). Operative time was similar to laparoscopic series. Ureteroureterostomy can be challenging using a minimally invasive ap-

proach, and that increses using a less technique. A suture to keep the ureter in place was used by the authors to facilitate the anastomosis. As with other procedures, minimally invasive thechniques offer cosmetic advantages as well as quicker recovery and less pain. Minimally invasive surgery gains more popularity for ureteric reconstruction type procedures as this described in the video, with LESS procedure as an option for retrocaval ureter repair.

# **REFERENCES**

1. Autorino R, Khanna R, White MA, Haber GP, Shah G, Kaouk JH, et al.: Laparoendoscopic single-site repair of retrocaval ureter: first case report. Urology. 2010; 76: 1501-5.

Dr. Jose Jaime Correa
Urologic Oncology Department
Hospital Pablo Tobon Uribe
Medellin, Colombia
E-mail: jocorreao@uces.edu.co