

Case Report of Surgical Management of Ureteral Endometriosis with Stenosis and Hydronephrosis, A Third Way?

Benita Knox¹, Charlotte Reddington^{1,2}, Martin Healey^{1,3}, Uri Dior^{1,4}, Claudia Cheng^{1,3}.

1.The Royal Women's Hospital, Parkville, Vic, Australia. 2. The Mercy Hospital for Women, Heidelberg, Vic, Australia.

3. The University of Melbourne, Parkville, Vic, Australia. 4. Endometriosis Center, Hadassah-Hebrew University Medical Center, Jerusalem, Israel

Background: Ureteric endometriosis, affecting up to 1% of endometriosis cases, may cause significant morbidity.[1] Surgical options include ureterolysis, partial ureteral resection, with possible ureteroneocystostomy, and ureteronephrectomy. Opinion on the best surgical management of these cases varies. [2]

Case presentation and management: A 34-year old woman presented with 2 weeks of worsening left flank pain and impaired renal function. Computed tomography showed left moderate hydronephrosis and an ovoid ureteric lesion (figures 1a&b). After insertion of a ureteric stent, laparoscopic ureterolysis and excision of a 2cm nodule from the left ureter was performed (figures 2a-d).

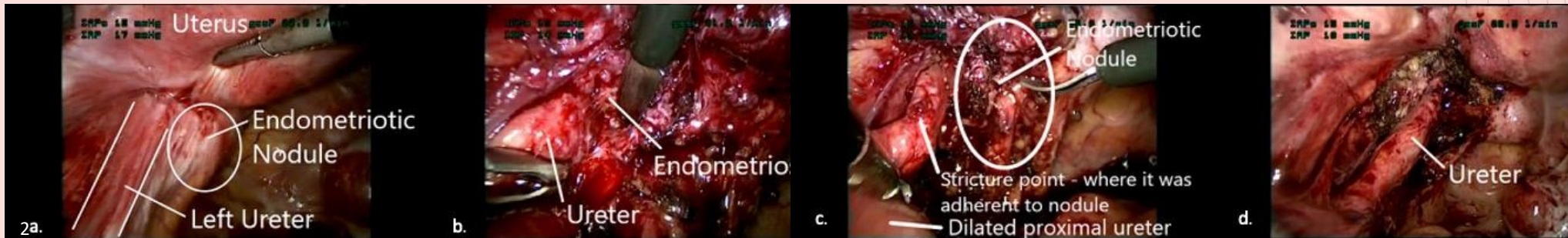


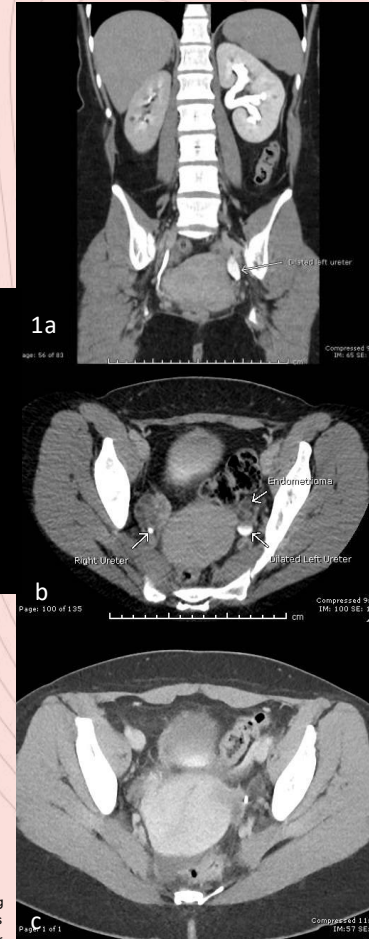
Figure 2a&b. Intra-operative finding of endometriotic nodule on left ureter.c&d. Post-excision of nodule, with residual dilated proximal ureter

Case follow up and outcomes: After nodule excision, the ureter remained strictured on intra-operative retrograde pyelogram imaging. Decision was made for re-stenting and observation with reassessment at 6 weeks. On review the urinary tract function recovered, the hydronephrosis (figure 1c) and pain resolved and no further surgery was needed.

Discussion: A number of case series showed high success rates of ureterolysis alone for obstructive uropathy.[3] Others advise resection due to concerns regarding recurrence and compromise to the ureteric blood supply.[2] We demonstrate the option of a potentially two-staged procedure: first ureterolysis alone, second ureteral resection only if obstruction persists. This allows time for resolution and recovery of ureteral structure and function and as such may avoid more complex surgery.

References: 1. Barra et al. *Hum Reprod.* 2018;24:710-730. 2. Friere et al. *Eur Urol Suppl.* 2017;16e800-e801. 3. Talreja et al. *Arab J Urol.* 2018;16:342-349.

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Figures 1a. Coronal CT delayed post contrast image of the kidneys demonstrating left hydronephrosis and hydroureter. b. Axial post contrast CT through the pelvis demonstrating dilatation of the left distal ureter