

Laparoscopic Resection of a Urachal Cyst Presenting as Deep Infiltrating Endometriosis

Royal Hampshire County Hospital, Winchester

Alice Stickland, Yovisha Vijayakumar, Keith Louden

Background

- The prevalence of urinary tract endometriosis (UTE) affects 20-52.5% of women with deep endometriosis.^{1,2}
- The bladder accounts for 85% of sites affected by UTE.³

Presentation

- 42-year-old nulliparous patient presented with longstanding heavy menstrual bleeding and cyclical pelvic pain.
- She had associated cyclical dysuria, dyskezia and deep dyspareunia.

Investigations

- She was investigated with ultrasound and MRI in our endometriosis centre.
- This suggested extensive endometriosis and an 8mm intravesical nodule.
- A flexible cystoscopy confirmed a bladder dome lesion.
- She was discussed at the MDT involving Gynaecology, Colorectal and Urology

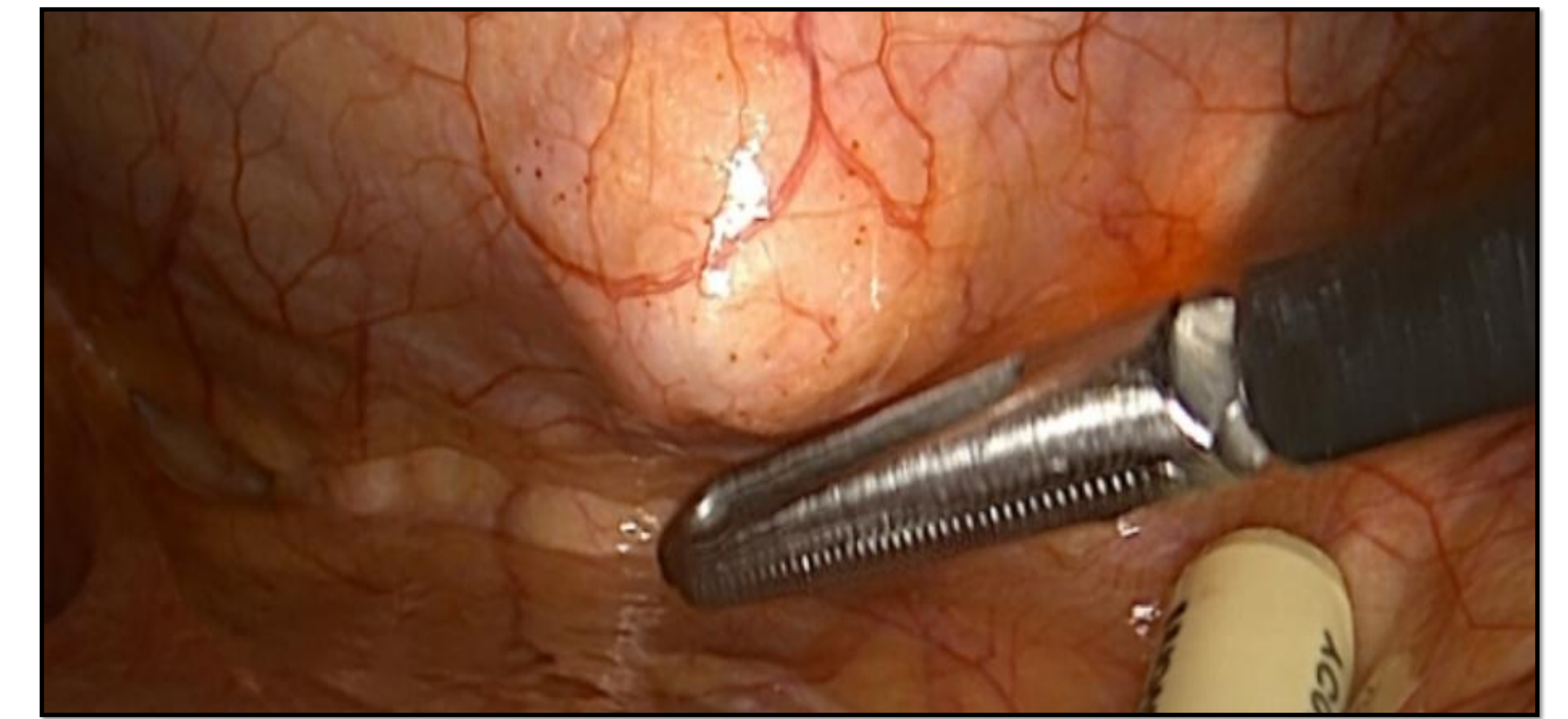


Progress

- She underwent total laparoscopic hysterectomy and bilateral salpingo-oophorectomy
- The operation was carried out by the gynaecology team with colorectal and urology team input
- Ureteric stenting was performed. The intravesicle lesion was visualised cystoscopically and marked with methylnblue dye, then resected laparoscopically.
- The bladder was closed with intracorporeal interrupted sutures and a leak test performed.
- The patient was catheterised for two weeks and recovered well.
- Histology confirmed endometriosis and a benign urachal cyst rather than bladder endometriosis.

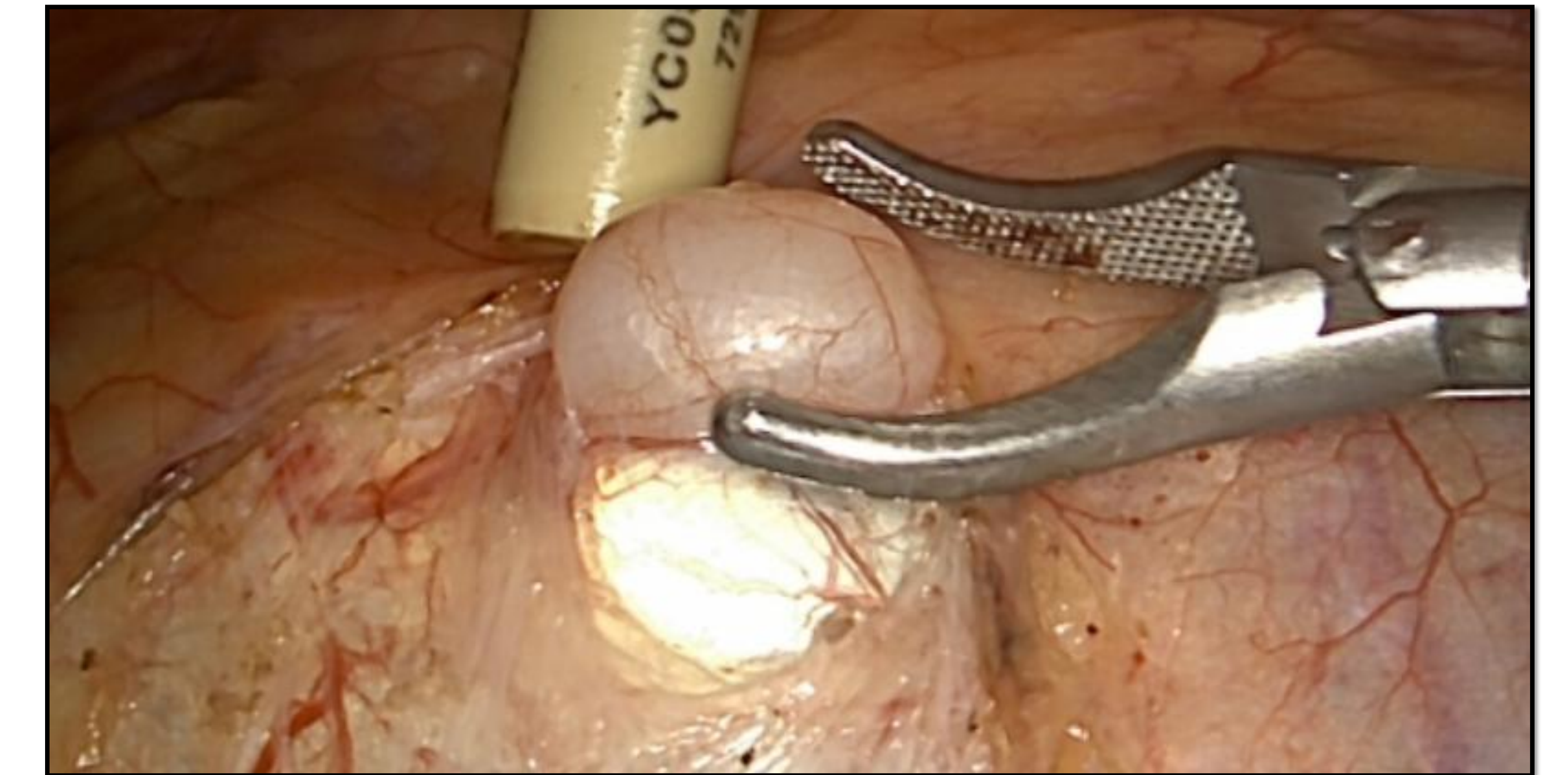
Discussion

- Urinary Tract Endometriosis can cause dysuria, haematuria, increased frequency and UTIs.
- Transvaginal ultrasound and MRI can be used as imaging to diagnose bladder endometriosis but nodules may be missed.
- Other intraluminal bladder lesions may appear similar and mimic endometriosis symptoms.
- Cystourethroscopy is helpful to exclude malignancy and map the location of the lesion, thereby assisting with surgical excision.



Conclusion

- The diagnosis of UTE can be challenging and is ultimately histological.⁴
- This case demonstrates the importance of multidisciplinary assessment and operating to manage complex cases.



References

1. Knabben, L.; Imboden, S.; Fellmann, B.; Nirgianakis, K.; Kuhn, A.; Mueller, M.D. Urinary tract endometriosis in patients with deep infiltrating endometriosis: Prevalence, symptoms, management, and proposal for a new clinical classification. *Fertil. Steril.* **2015**, *103*, 147–152
2. Gabriel, B.; Nassif, J.; Trompoukis, P.; Barata, S.; Wattiez, A. Prevalence and Management of Urinary Tract Endometriosis: A Clinical Case Series. *Urology* **2011**, *78*, 1269–1274.
3. Berlanda, N.; Vercellini, P.; Carmignani, L.; Aimi, G.; Amicarelli, F.; Fedele, L. Ureteral and Vesical Endometriosis. *Obstet. Gynecol. Surv.* **2009**, *64*, 830–842.
4. Leonardi M, Espada M, Kho RM, Magrina JF, Millischer A-E, Savelli L, Condous G. Endometriosis and the Urinary Tract: From Diagnosis to Surgical Treatment. *Diagnostics*. 2020; 10(10):771. <https://doi.org/10.3390/diagnostics10100771>