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# BLADDER ENDOMETRIOSIS: CLINICAL PRESENTATIONS OF AN UNCOMMON CLINICAL CONDITION

#### Hypothesis / aims of study

Endometriosis is defined as the presence of extrauterine functional endometrial tissue and is a common disease affecting up to 15 percent of women of reproductive age(1). Bladder endometriosis occurs in about 1 percent (2) of women with pelvic endometriosis and can mimic bladder tumours in their clinical presentation. Sympttoms, when present, can mimic those of recurrent cystitis.(3)

## Study design, materials and methods

A retrospective case series was carried out where patients who had the pathological diagnosis of endometriosis on histological specimens of resected bladder tumours were identified from January 2010 to January 2012 at a single tertiary hospital in Singapore. Three patients were identified. A 30-year old, 46-year old and 35-year old female each underwent transurethral resection of the bladder tumour.

#### <u>Results</u>

Two of the patients were symptomatic at presentation, presenting with symptoms of dysmenorrheal and irritative urinary symptoms. One of them was asymptomatic with the bladder lesion detected incidentally during abdominal imaging. All of them underwent preoperative imaging with ultrasonography (US), computed tomography (CT) or magnetic resonance imaging (MRI). Preoperative imaging and cystoscopy were unable to conclusively diagnose bladder endometriosis in one of them. None of our patients received preoperative medical treatment, due to the inconclusive nature of the bladder lesion on preoperative investigations. (See Table 1)

#### Interpretation of results

Bladder endometriosis has a varied clinical presentation. There is currently no preoperative investigation that can conclusively differentiate bladder endometriosis from other bladder tumours, but certain cystoscopic features are typical of endometriotic lesions – bluish oedematous submucosal lesions, which may not occur in all patients.

#### Concluding message

Bladder endometriosis can be managed conservatively if it is asymptomatic, no ureteral involvement and does not result in obstructive uropathy. However, if ureteral involvement and/or obstructive uropathy or suspicion of bladder tumour is present, surgical resection is the best management.

Patient Number	Age (years)	Known history of endometriosis	Clinical Presentation	Endoscopic findings	Imaging
1	30	Yes	Incidental finding on imaging	Large bulky mass over the base and trigonal area with the left ureteric orifice tented extrinsically by a bulky mass	US – sessile polypoidal mass with left hydronephrosis and hydroureter
2	45		Incidental finding on imaging, irritative urinary symptoms	Chocolate-coloured cysts noted upon resection	CT urogram – intravesical broad-based non-enhancing posterior bladder wall mass with left hydronephrosis and hydroureter
3	35	No	Dysmenorrhea	Cystic lesion medial to right ureteric orifice with underlying nodule with a bluish tinge	MRI – Intramural posterior bladder wall tumour with nodular extension into bladder cavity

#### Table 1

## References

1. Hasson, H.M. Incidence of endometriosis in diagnostic laparoscopy. J. Reprod Med, 16: 135, 1976

2. Alridge, K.W. et al. Vesical endometriosis: a review and 2 case reports. J. Urol, 134, 539-541.

3. Sircus T.E. et al. Bladder detrusor endometriosis mimicking interstitial cystitis. Urology, 32, 339-342.

## **Disclosures**

**Funding:** NONE **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** Identity of the patients were not disclosed; small number of patients and the subjects were not contacted for further enquiry for the purpose of the study. Information for the study was based solely on casenote documentation. **Helsinki:** Yes **Informed Consent:** No