

INTRINSIC URETERAL ENDOMETRIOSIS PRESENTING AS URETERIC STRICTURE

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ABSTRACT

Ureteral endometriosis (UE) is a relatively rare situation. Endometriosis affects 5-10% of reproductive age women. Urinary tract endometriosis occurs in 1%-5.5% females with endometriosis. A 32 year old woman presented with recurrent, cyclical right loin pain for the past 01 year. There was no history of urinary complaints, fever or bowel symptoms. There is history of LAVH 5 years back. Clinical examination was unremarkable and investigations were within normal limits. Ureteroscopy showed polypoidal mass in distal ureter, which was excised and DJ stent was placed. Patient was started with hormonal therapy for 04 months followed by Right Ureteric reimplantation.

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INTRODUCTION

Endometriosis is defined by the ectopic presence and growth of functional endometrial tissue, glands, and stroma, outside the uterus [1]. Endometriosis incidence is 10%–15% of all women of reproductive age [2]. The Urinary system is rarely involved and is found in about 1%–5.5% of all women with endometriosis [3] with the bladder, ureter, and kidney being affected in a ratio of 40:5: 1[4]. We report a case of symptomatic ureteral endometriosis, which underwent endoscopic excision, hormonal therapy. It was followed by uretric implantation

Case report

A 38 year old female was admitted with a history of recurrent, cyclical right loin pain for the past 01 years. No history of urinary complaints, fever or bowel symptoms. There is history of LAVH 5 years back for abnormal uterine bleed. Physical Examination was non remarkable and Lab investigations were within the normal limits (Hb–12.6gm/dl, TLC-6,000/cumm, BUN- 10mg/dl, Sr Creat – 0.6mg/dl, Serum electrolytes-within normal limits). Contrast CT (abdomen & pelvis) showed right gross hydroureteronephrosis with a distal ureteric stricture (Fig 1, 2). On ureteroscopy polypoidal mass was found in distal ureter which was excised and DJ stent placed on 01/04/19(Fig 3).

HPE suggestive of endometriosis (Fig 4). Patient started on hormonal therapy (LHRH agonist – Leuprolide) for 04 months followed by Right Ureteric Re-implantation on 06/08/19.

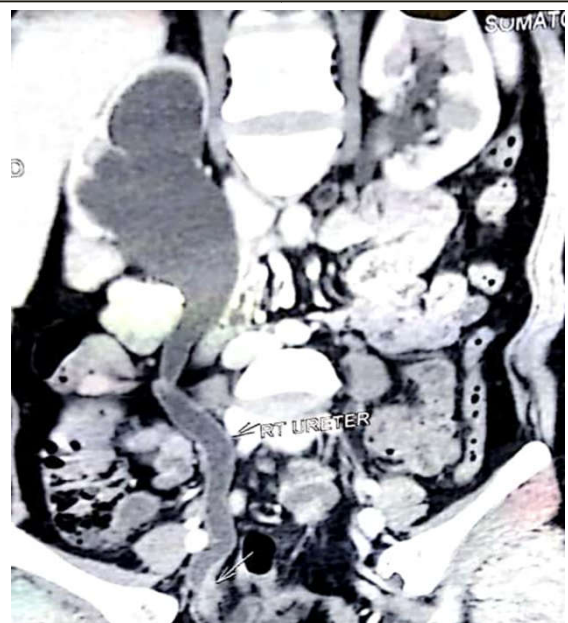


Figure 1 CECT (Abdomen & Pelvis) showing right distal ureteral mass with HDUN (Coronal Section)

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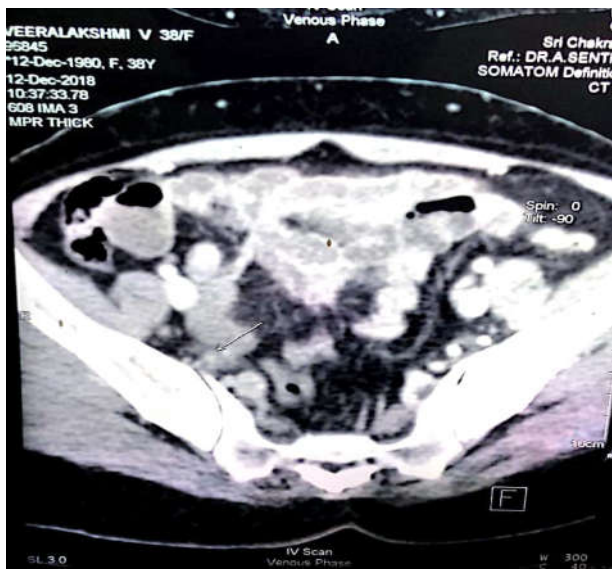


Figure 2 CECT (Abdomen & Pelvis) Showing Right Distal Ureteral Mass (Axial Section)

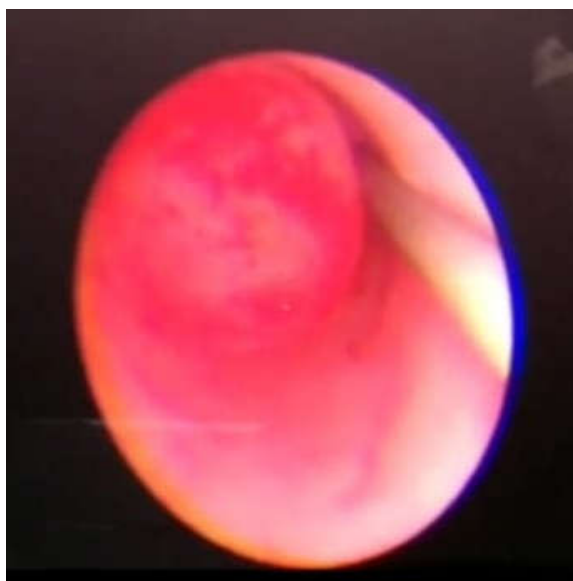


Figure 3 Intraoperative Ureteroscopic Rightureteric Polypoidal Mass

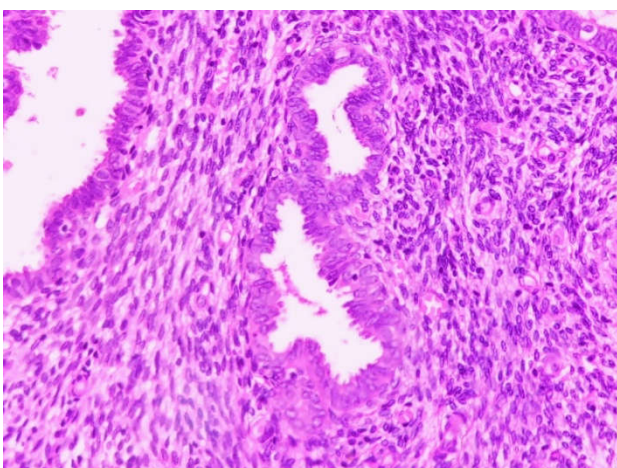


Figure 4 HPE- Suggestive Of Endometriosis

DISCUSSION

Endometriosis is defined as the presence of endometrial tissue outside the uterus. UTE can affect the kidneys, ureter, bladder, or urethra[1,2]. Involvement of the urinary tract is uncommon, occurring in 1% to 5.5% of women with endometriosis,[1]

with a peak age of incidence between 40 and 44 years[3]. UE is rare, representing 9% to 15% of the cases of UTE[1,2]. The pathogenesis of UTE is still not well defined, although many proposed theories for the involvement of extra uterine pelvic tissue.

The Possible Mechanism of dissemination of endometriosis includes lymphatic or hematogenous spread, direct extension into or out of the uterine wall, and retrograde menstrual flow through the fallopian tube. An embryonic theory has been described in which a metaplastic reaction of a remnant Mullerian or Wolfian duct is present, as well as iatrogenic theory in which extrauterine dissemination of endometrial cells takes place after pelvic surgery [1–3]. UE can be classified as intrinsic (involvement of muscularis propria and mucosa) and extrinsic (involvement of the adventitia of the ureter), [1–3] with the latter being more common [1, 4]. Involvement of the left ureter is more common, and the most frequently affected segment of the ureter is distal [2–4]. Ureteral involvement may lead to urinary tract obstruction, giving rise to hydronephrosis, and consequently results in a loss of kidney function [1, 2, 4]. UE is characterized by nonspecific symptoms [1, 2, 4]. Fifty percent of cases are asymptomatic, [1, 2] making diagnostic timeline difficult [2]. Commonly presenting complaints are pelvic pain, dyspareunia, and dysmenorrhea [1, 3]. Hematuria can be found in <17% of patients [1]. Imaging remains essential to the diagnosis; however, a preoperative diagnosis solely based on imaging is challenging. To ensure a correct diagnosis, the histopathologic study of the specimen is required. Frequently, initial abdominal ultrasonography reveals hydronephrosis;[1] however, this is not found in all patients. Some other studies include intravenous pyelography, ureteroscopy with endoluminal ultrasonography, laparoscopy, CT, and MRI [1, 3, 4]. The goal of treatment in UE is to relieve the obstruction, eliminate symptoms, and most importantly to preserve renal function[2,3]. Treatment options include hormone therapy, surgical approaches, or a combination of both. Hormonal therapy agents include danazol, gonadotropin-releasing hormone agonists, estrogen or progestin combination, progestin alone, and medroxyprogesterone [1]. Hormonal therapy is contraindicated as the first-line treatment in obstructive UE [1]. Surgical interventions have been considered the best treatment for patients with obstruction [3]. It include ureterolysis, distal ureterectomy, ureteral reimplantation, and endourologic management [1–4]. Nephroureterectomy is an effective treatment in a poor functioning kidney. Surgery to resect the involved segment of the ureter along with endometriotic tissue and re-implant the ureters (uretero-cystoneostomy) has shown long-term favorable results.

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