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ORIGINAL ARTICLE

A Rare case of Bilateral Lower Ureteral Endometriosis

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ABSTRACT

Ureteral endometriosis is one of the most serious misdiagnosed conditions among the women that can lead to urinary tract obstruction, with subsequent hydronephrosis, hydroureter, and kidney dysfunction. Approximately 10% of female suffered with misdiagnosed endometriosis with common symptoms like pelvic pain and infertility. Lesions involve the urinary tract in up to 6% of cases with ureteral involvement in a smaller subset of .08% to 1%. Most of the cases of endometriosis were misdiagnosed due to similar symptoms with other disease conditions. This case report may help to overcome such conditions and it may aid in the right diagnosis of urinary bladder endometriosis for other disease conditions.

Key words: *Endometriosis, Bladder ,Ureter, Urinary Tract and Diagnosis*

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INTRODUCTION

About 10-15% of women at reproductive age are susceptible to various estrogen dependent disorders such as Endometriosis [1]. It is defined as a non malignant, occurs spontaneously while menstruation with pain and also risk factor for infertility [2]. However, the etiology of endometriosis and its pathological mechanisms still unclear [3,4]. Furthermore, the clinical compliant of Endometriosis of the urinary bladder is very rare. About 0.3% of the women were reported as endometriosis of the ureter, it can be either extrinsic or intrinsic [6]. The involvement of the urinary bladder in the extragonadal endometriosis was <1%. Whereas, about 6% of women with pelvic endometriosis were shown Deep infiltrating endometriosis (DIE), occurred either in ureters or bladder[5].

CASE REPORT

A 29 years old woman working as house maid came to Saudi Arabia in 2009. Three months after her arrival she presenting to the hospital with the complaint of lower abdominal pain associated with menstrual cycle in every month. She was given non steroidal anti-inflammatory drugs NSAID to relieve her pain during the periods. Two months later, she noticed that some changes in her face like pallor and also she complained oliguria and dysuria with lower abdominal pain the patient was brought to the hospital and clinical laboratory investigation were done, Creatinine 9.8umol/L, Urea 139 mg/dl, Hemoglobin 6.2g/dl. Later she was admitted in female surgical ward for further investigations, Ultra sound showed, Bilateral hydronephrosis left >right, CT scan reviled bilateral hydronephrosis with dilation of both upper ureters, Left side lower ureteric stone. This Bilateral uretic stones causing bilateral obstruction (Figure.1).

Later, she was admitted in I.C.U for observation of any obstruction and for required blood transfusion to bring blood potassium at normal levels. After 10 days, bilateral Double J (DJ) stent were inserted. Her Creatinine levels were normal at 5th day after operation, then she was discharged from the hospital. After

3 months bilateral D.J. was removed and ureters copy was done. It was showed bilaterally nothing as abnormal. Later, on second day of post operation she was complained of abnormal pain and anuria. Again she admitted in hospital ultra sound was done, it showed that, bilateral hydronephrosis again bilateral D.J. were inserted. CT scan was done for follow up, and retroperitoneal diagnosis was done. She was advised to exchange D.J. every 6 months .On 1stFebruary 2014 bilateral D.J. removed and she was given a chance to observe the kidney function, but third day of post operation the same problem occurred again she admitted to hospital for D.J. insertion but it was failed. The Creatinine raised to more than 9,6 mmol/l, then emergency nephrostomies were inserted bilaterally. CT scan was done again and noticed that the same conditions she had before in the past (Figure 2). Nephrostogram was done showing obstruction in lower part of both ureters (Figure 3). We planned some differential diagnosis for this case to avoid misdiagnosis. The differential diagnosis are

- Congenial abnormality of vesicureter
- Retroperitoneal fibrosis
- Endometriosis

After a keen case discussion, we came to the final decision for the surgery. The sugery was done to explore the vesicoureteral, both lower ureter part excised , Baori flap was done bilaterally and tissues were sent to histopathology laboratory it showed endometriosis of both ureters.

DISCUSSION

Ureteral endometriosis is defined as unilater, per-ureteric ring[10]. It occurs as extrinsic or intrinsic depending on the infiltrated ureteral wall sub mucosal or uroepithelium layers [10]. As compare to intrinsic ureteral endometriosis, extrinsic endometriosis was more apparent[11]. Surgery for pelvic adhesions or DIE secondary to endometriosis stands for high risk ureteric complications[7] such as, uroperitoneum or urinoma formation that leads to several adverse effects on kidney functions[9]. Generally, ureterolysis and ureter decompression methods are following in the extrinsic ureteric endometriosis surgery [8]. If the endometriosis is intrinsic, a partial resection of the ureter with direct ureteric neoimplantation or end-to-end anastomosis techniques are followed apart from the extrinsic surgery methods[8]. It was suggested that, complex operations are very useful and should apply in an interdisciplinary collaboration [9].This case report illustrated the most common difficulties occurred during the diagnosis of isolated ureteric endometriosis and its possible solution to avoid misdiagnosis. Presently, the preoperative diagnosis based only on the suggestive symptoms, and the presence of suspicious radiological abnormalities as a hydronephrotic, hydronephrotic changes as well as ureteric claculi or depending on the some characteristic lesions occurred during laparoscopic and endourologic procedures. We conclude that endometriosis in the patient should be diagnose with the differential diagnosis approach to reveal ureteric lumen filling defects and unexplained ureteric obstruction.

Figure 1: Axial CT scan showing (arrows) bilateral calculi in the distal end of both ureter.

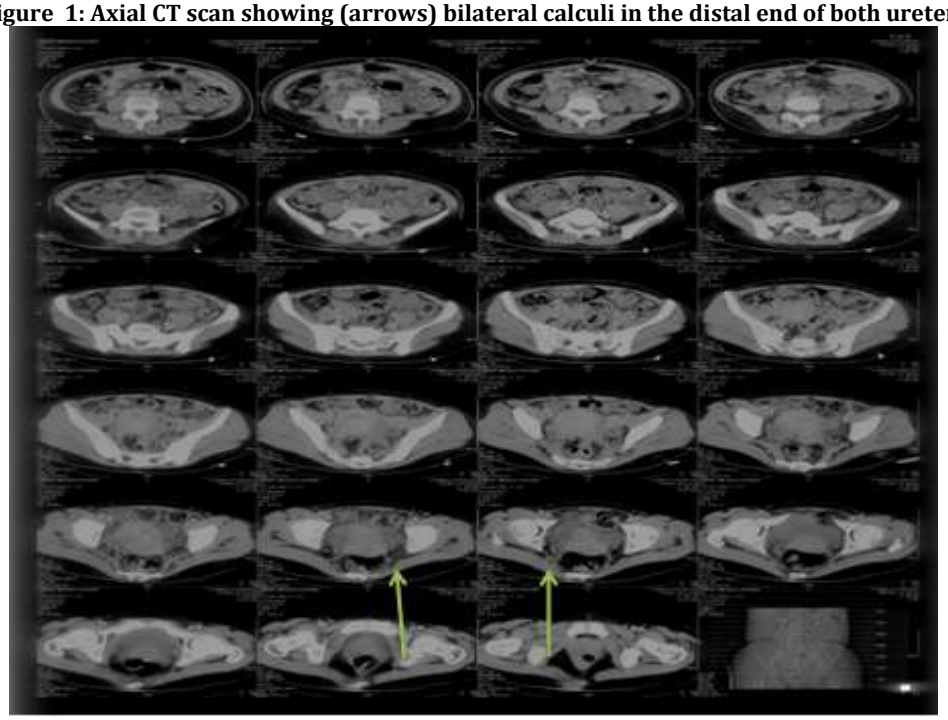


Figure 2: Axial CT scan after nephrostomy showing (arrows) normal both kidneys with no evidence of hydronephrotic changes.

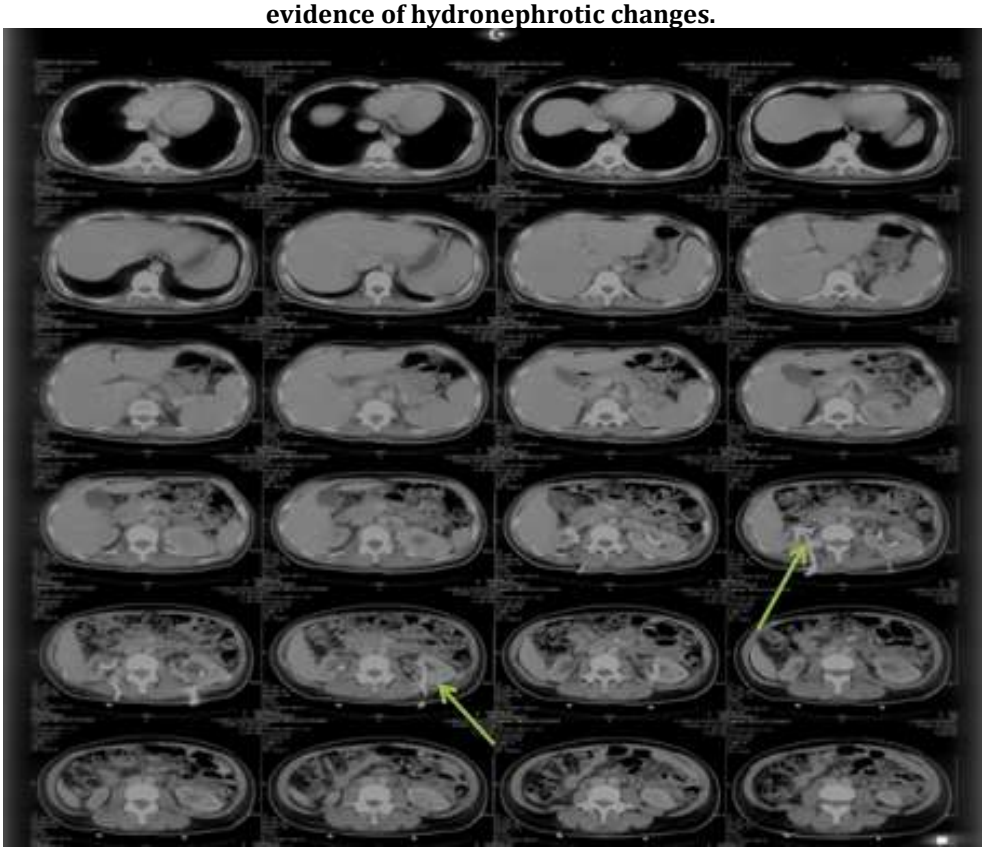
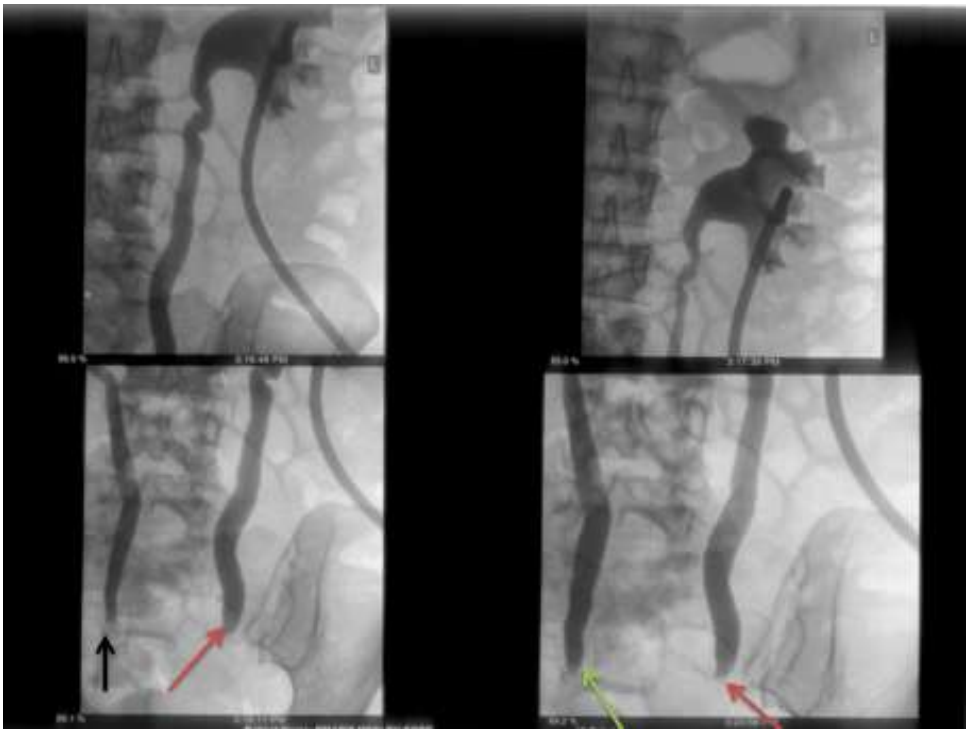


Figure 3: Nephrostogram Showing (arrows) bilateral hydrouretes due to stone impacted in the distal ends of both ureters.



CONCLUSION

In most of the cases, Bladder endometriosis became misdiagnosed due to the clinical symptoms were mimic with other disease conditions such as, Interstitial cysytitis acute appendicitis, celiac disease,

irritable bowel disease and inflammatory bowel disease. This case report may help to overcome such conditions and it may aid in the right diagnosis of urinary bladder endometriosis cases. This case reports also reported that, the possible symptoms of bladder and lower part of uterus endometriosis which will helpful in the differential diagnosis.

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