

Laparoscopic Identification of Double Ureter Variant in Severe Endometriosis

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A 56-year-old woman who previously had a total abdominal hysterectomy for myoma was admitted for the left lower quadrant pain with ultrasound and computed tomography scan findings of the left ovarian mass torsion, and subsequently, operative laparoscopy was done. Intraoperative findings showed dense pelvic adhesions with multiple endometriotic implants.

The surgery started with extensive adhesiolysis, and on opening the retroperitoneum and dissection to identify the left ureter, it was noticed that there were two tubal structure alongside each other, and peristaltic movement was seen separately [Figure 1]. The operation then proceeded with left salpingo-oophorectomy.

Due to suspicion of duplication in the left urinary collecting system, intravenous pyelogram was performed and confirmed a duplication variant of the left urinary collecting system [Figure 2].

Duplication in the urinary collecting is a relatively common condition with an estimated incidence of 0.8%–1.8%,^[1] and this congenital anomaly is more common in female, and asymptomatic in most cases.^[2]

There are different variants of urinary collecting system duplication, which usually including the ureter.^[3]

Identification of the ureter and ureterolysis may need during pelvic surgery, such as deep infiltrating endometriosis. Thus, surgeons must keep in mind the possibility of ureter duplication variants when they notice two tubal structure, to avoid ureteric injury.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

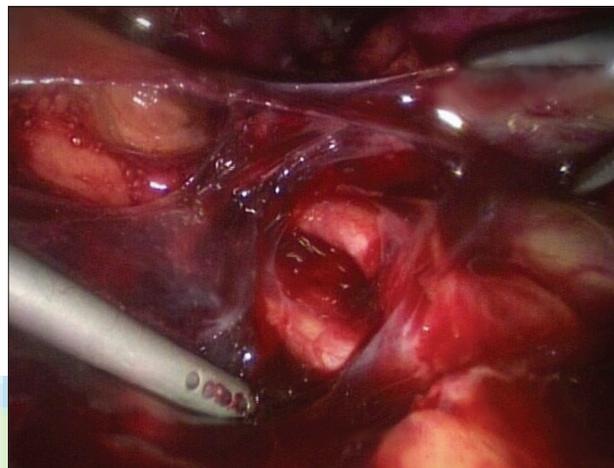


Figure 1: Laparoscopic view of pelvis showing left side double ureter variant



Figure 2: Pyelogram showing duplication in the urinary collecting system

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Conflicts of interest

There are no conflicts of interest

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REFERENCES

1. Advincula A, Truong M, & Lobo RA. Endometriosis. In: Gershenson DM, Lentz GM, Lobo RA, Valea FA, eds. *Comprehensive Gynecology*. 7th ed., Philadelphia: Elsevier; 2017. p.423-42.
2. Tanaka Y, Koyama S, Shiki Y. Duplicated ureter diagnosed during total laparoscopic hysterectomy. *Gynecology and Minimally Invasive Therapy* 2013;2:99-100.
3. Fernbach SK, Feinstein KA, Spencer K, Lindstrom CA. Ureteral duplication and its complications. *Radiographics* 1997;17:109-27.

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