## UNILATERAL ENDOMETRIOSIS CONFINED TO OBSTRUCTED SIDE IN UTERUS DIDELPHYS IN ADOLESCENCE- MORE EVIDENCE TO SUPPORT RETROGRADE MENSTRUATION AS CAUSATIVE

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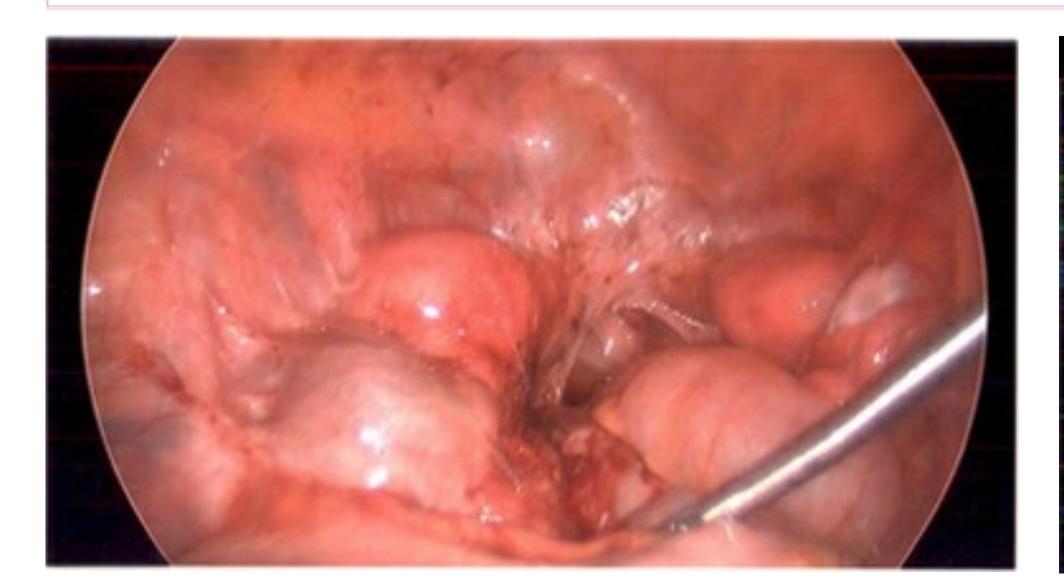
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## Background

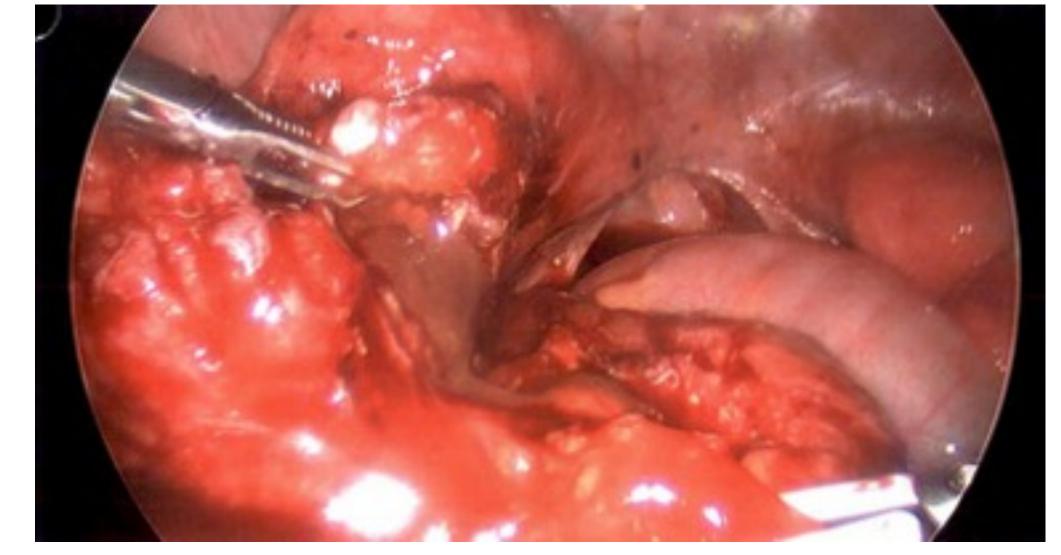
Endometriosis is the presence of ectopic endometrial tissue, causing pelvic pain, dysmenorrhoea, and other symptoms in 2-10% of fertile females. Its pathogenesis is complex, with retrograde menstruation being a longstanding theory. Increased retrograde flow may lead to higher susceptibility to immune system mediated development and progression of endometriosis. Symptoms typically coincide with the onset of menses in adolescence.

## Case Report

A 15-year-old female with severe dysmenorrhoea was referred to the Queensland Paediatric and Adolescent Gynaecology service. Ultrasound revealed a left adnexal solid cystic lesion, subsequent MRI showed Uterus Didelphys with cervical aplasia of the left side and hydrosalpinx. The patient underwent examination under anaesthesia with diagnostic laparoscopy, left hemi-hysterectomy, left salpingectomy, left ovarian cystectomy, and adhesiolysis. Histopathology revealed serosal endometriosis. Specifically, signs of endometriosis lesions were located ipsilaterally to the obstructed left hemi-uterus. Notably there was no evidence of endometriosis on the right patent uterus didelphys side.







Intra-operative images illustrating a unilateral focus of endometriosis on the side of cervical aplasia.

## Discussion

This case illustrates the unilaterality of endometriosis confined to the side with specific uterine outflow tract obstruction - leading to the ipsilateral migration of endometrial cells. Many young females experience some level of retrograde menstruation due to the adolescent uterine anatomy, with a small, tight, still anatomically maturing cervix of a post menarcheal child, compounded by heavy menstrual bleeding from anovulatory estrogen unopposed cycles. Therefore, we believe this case supports the theory of retrograde menstruation where an overwhelming volume of retrograde flow – in this instance secondary to unilateral anatomical outflow obstructive anomaly – leads to worsened clinical disease, with no evidence of endometriosis on the patent side.





