

Case	(572) Hematocolpos by imperforate hymen: uncommon cause of abdominal pain
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## CASE PRESENTATION

An 11-year-old female presented with acute right lower quadrant abdominal pain associated with bladder tenesmus, without dysuria. No fever, nausea or vomiting. Blood tests were normal.

The patient was discharged with scheduled analgesia. After 24 hours, she returned with the same symptoms that did not subside with the analgesia, now showing mild leukocytosis. An abdominopelvic ultrasound was performed to rule out acute appendicitis.

Ultrasound showed a large complex fluid collection occupying the vagina extending inferiorly from the endometrial cavity, and this was free moving between the two. The fluid showed intermediate echogenicity, consistent with unclotted blood. The appendix was normal and no other abnormalities were found in the abdominal exam.

## DISCUSSION

Diagnosis: Hematocolpos by imperforate hymen.

The imperforate hymen although being the most frequent congenital vaginal malformation, is uncommon, with an estimated incidence of 0.1 %. It can occur in isolation or associated with other genitourinary malformations such as vaginal and uterine septa, vaginal partial atresia, uterine duplicity, renal aplasia or bladder and urethral duplicity. It usually manifests with the onset of puberty in patients with primary amenorrhea and normal secondary sexual characteristics. It may manifest as abdominal pain, micturition symptoms, acute urine retention, and/or a painful suprapubic mass. On examination, a violet domed hymen secondary to hematocolpos can be seen.

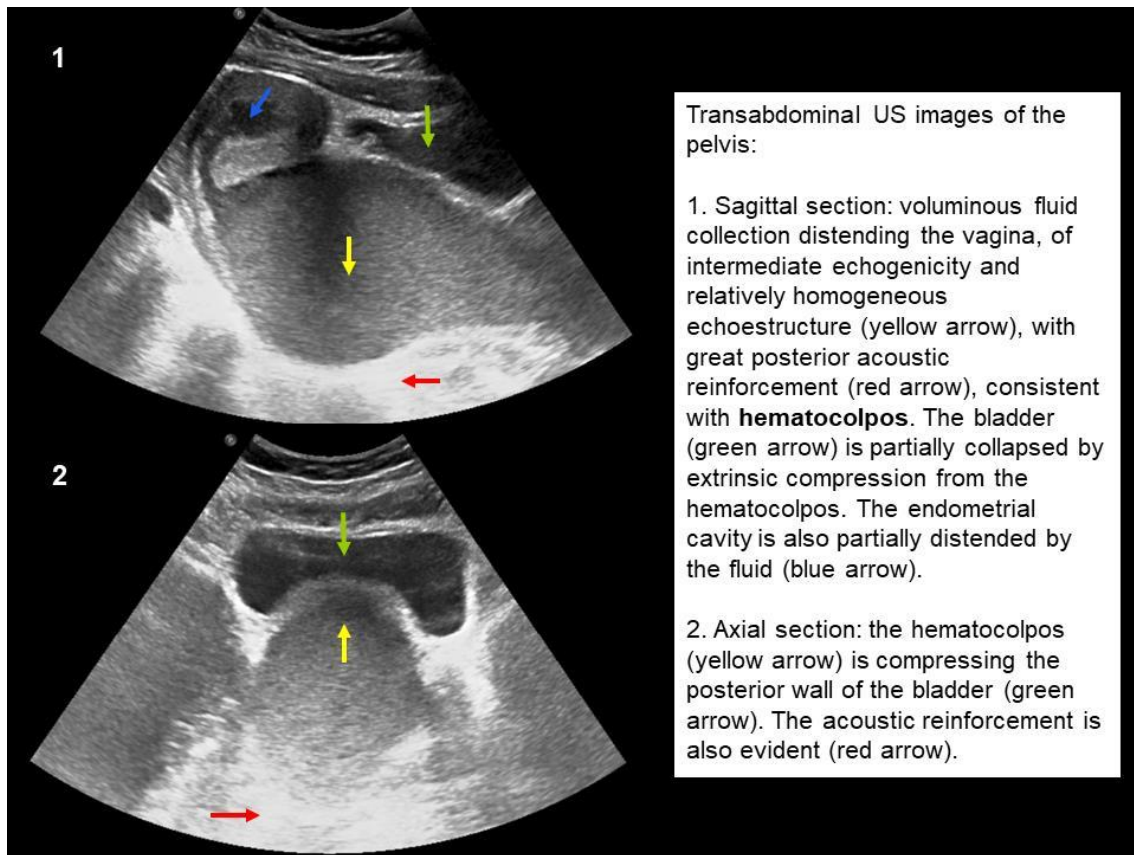
Abdominal ultrasound is the imaging test of choice, allowing visualization of hematocolpos and ruling out associated anomalies. Hematocolpos can be observed as a variable sized collection contained in the vagina, of intermediate echogenicity, relatively homogeneous echostructure, and great posterior acoustic reinforcement. When hematocolpos progresses, blood can fill the uterus (hematometra), move into the tubes and even flow into the peritoneum (hemoperitoneum). Bilateral hydronephrosis can also occur due to extrinsic compression of the urethra and bladder by the distended vagina.

The diagnosis should be made as early as possible and be based on a detailed clinical history and physical examination, which should include careful genital inspection.

## CONCLUSION

Although the imperforate hymen and the consequent hematocolpos are not frequent pathologies, they should be taken into consideration in the differential diagnosis of acute

abdominal pain in early pubescent females without menarche. A clinical history and detailed exploration, together with an ultrasound study that supports clinical suspicion, are fundamental.



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