

Hematometrocolpos in a young girl

A Case report & Review of Literature

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Background

- Imperforate hymen is the most common obstructive congenital anomaly of female genital tract with an incidence of 0.01% to 0.05%¹
- It is a rare sporadic event occurring due to defective resorption of Mullerian septum²
- It needs to be differentiated from other obstructive lesions like vaginal atresia, McKusick-Kaufman Syndrome, Herlyn-Werner-Wunderlich (HWW) syndrome and OHVIRA (Obstructive HemiVagina and Ipsilateral Renal Agenesis) syndrome³

Case

- A 15-year girl presented to the Emergency Department with primary amenorrhea, severe abdominal pain and feeling a bulge in the vagina.
- She had cyclical abdominal pain for 6 months and was otherwise well
- On examination, she had normal secondary sexual characteristics, normal external genitals and an imperforate hymen

Management & Intra operative findings

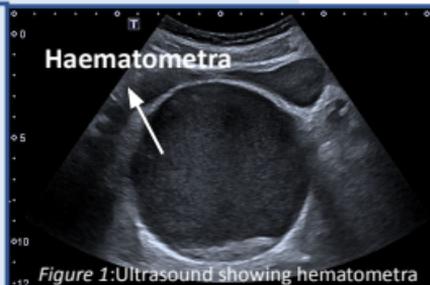
- Consent for Examination Under anaesthesia and drainage of Hematometrocolpos was taken
- Normal external genitalia. Imperforate hymen seen
- Under direct ultrasound guidance, about 700ml of brown menstrual blood drained with a cruciate incision over hymen
- Uterine cavity which was distended, seen to be gradually collapsing and was empty at end of procedure
- The post operative recovery was uneventful and follow up ultrasound of renal tract was normal too

Discussion and conclusion

- Imperforate hymen results from incomplete canalisation of the endoderm of urogenital sinus
- Due to its rarity, a high index of suspicion is required for diagnosis
- The presenting symptoms can be primary amenorrhea with cyclical abdominal pain, lower abdominal mass, constipation or urinary retention
- Most of the cases are diagnosed during adolescence. Ultrasound is the primary modality of investigation
- Delay in the diagnosis may result in complications like pyocolpos, endometriosis and infertility. Thus early diagnosis is essential for better outcomes

References

1. Lui CT, Chan TWT, Fung HT, et al. A retrospective study on imperforate hymen and hematometrocolpos in a regional hospital. *Hong Kong J Emerg Med* 2010; 17: 435-440.
2. Mwenda AS. Imperforate Hymen-a rare cause of acute abdominal pain and tenesmus: case report and review of the literature. *Pan Afr Med J* 2013; 15: 28
3. Egbe TO, Kobenge FM, Wankie EM. Virginity-sparing management of hematocolpos with imperforate hymen: case report and literature review. *SAGE Open Med Case Rep.* 2019 May 2;7:2050313X19846765. Doi: 10.1177/2050313X19846765. PMID: 31105948; PMCID: PMC6834434



Ultrasound findings

- Transabdominal ultrasound was done
- Uterus enlarged measuring 567cc
- Both the endometrial cavity and vaginal canal grossly distended with echogenic fluid, compressing the bladder anteriorly
- Appearance consistent with Hematometrocolpos
- Secondary mild right hydronephrosis

