International Journal of Science and Research (IJSR)
ISSN: 2319-7064
ResearchGate Impact Factor (2018): 0.28 | SJIF (2019): 7.583

A Case Study of Imperforate Hymen and its Management

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Abstract: ***Primary amenorrhea may be due to anatomical or endocrinological causes. Imperforate hymen causes primary amenorrhea in adolescent girls. Symptoms of imperforate hymen include cyclical abdominal pain, back pain, difficulty in urination and occasionally defecation. Imperforate hymen can be confused with ovarian masses, fibroid uterus or gastrointestinsal tumors so it is important to diagnose and treat it early. In this paper an young adolescent girl presented to the opd with complaints of back pain, abdomen pain, mass per abdomen and primary amenorrhea. On per vaginal examination imperforate hymen is diagnosed, on usg hematocolpos is seen. Under short GA patient in lithotomy position cruciate incision is made on the hymen and around 600ml of blood drained.***

Keywords: Imperforate, hymen, cruciate, incision, primary amenorrhea hematocolpos

1. Introduction

Imperforate hymen (IH) is an uncommon congenital anomaly of the female genital tract, in which the hymen completely obstructs the vaginal opening, with an approximate incidence of 0.05–0.1%.IH obstructs uterine and vaginal secretions (also called hematocolpos), causing amenorrhea and cyclic pelvic pain . IH may be associated with other developmental anomalies , but some reports propose that it is not generally related to Mullerian anomalies, and evaluating urogenital anomalies is unnecessary . There have been rare cases of familial IH occurrence; most cases are thought to occur sporadically and no genetic mutations have been identified.

IH is often diagnosed in adolescent girls after menarche, mainly presenting with amenorrhea and lower abdominal pain or urinary retention.

2. Case Presentation

A 14 year old girl presented to hospital with complaints of lower abdominal pain, tenesmus, loss of appetite; urgency and increased frequency of urination. She did not have constipation, diarrhoea, vomiting, fever.

She complained of primary amenorrhea but she had developed secondary sexual characteristics. She had no previous history of any medical illness, no history of any surgeries underwent in the past. There is no familial history of malignancy.

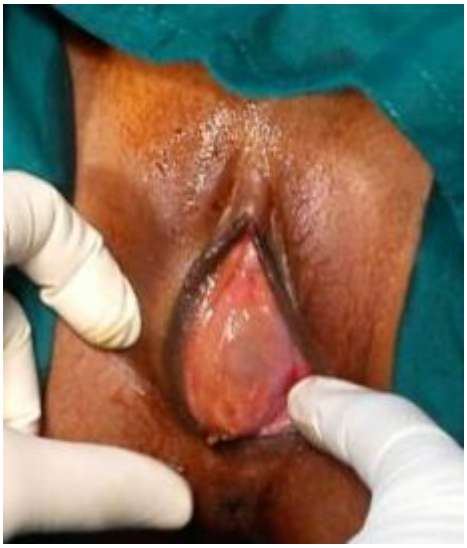
On examination: she was alert and in severe pain, walking stooped over. Her vitals are within normal limit.

On per abdomen examination she had moderately tender suprapubic mass corresponding to a uterus at 16 weeks.

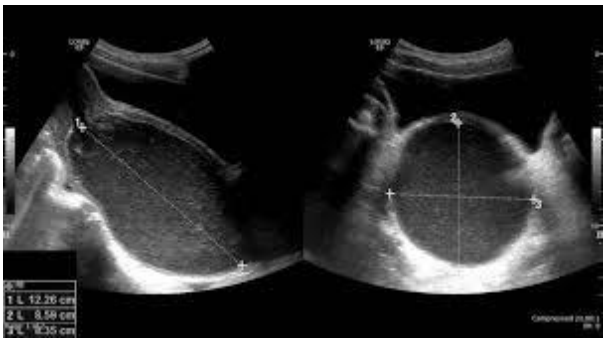
Rectal examination revealed an anterior mass.

On Perineal examination:

A bulging imperforate hymen is seen.



Ultrasound done revealed distended uterus and vagina all filled up with homogenous thick fluid.



Under short general anesthesia, patient positioned in lithotomy position a cruciate incision is made on the hymen and 500 ml of thick chocolate coloured blood evacuated.Edges of the wound is everted and stitched to the adjacent vaginal tissue with interrupted sutures of 2/0 chromic catgut.

3. Discussion

Fusion of the caudal end of the paramesonephric ducts and urogenital sinus forms the hymen membrane,failure of degeneration of epithelial cells in the center of this

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membrane leads to imperforate hymen. Patient usually presents with complaints of either primary or secondary amenorrhea, cryptomenorrhea, recurrent cyclical pain, low back ache and urinary complaints like increased frequency or urgency of urination.It may lead to acute urine retention due to pressure on the bladder by the distended uterus causing angulation at the bladder neck and kinking of the urethra. It may further lead to Hydroureters, Hydronephrosis, Renal failure, Acute bacterial nephritis, Vaginal outflow obstruction- Cryptomenorrhea, Intestinalobstruction, Constipation, Tenesmus, Lymphovenous obstruction leading to oedema.

Surgical hymenotomy under local or general anaesthesia with cruciform, X-shaped incision is done. X-shaped incision has the advantage of reduced risk of injury to the urethra. Pressure on the uterus in order to expel more blood is discouraged as it can lead to retrograde flow through the tubes causing endometriosis and tubal adhesions.

References

[1] Nagai N, et al. Life threatening acute renal failure due to imperforate hymen in an infant. Paediatrics International. 2012 Apr;54(2):280–2. [PubMed] [Google Scholar]
[2] Eksioglu AS, et al. Imperforate hymen causing bilateral hydroureteronephrosis in an infant with bicornuate uterus. Urology Case Reports. 2012;2012:102683. Epub 2012 Jun 7. [PMC free article] [PubMed] [Google Scholar]
[3] Basaran M, et al. Hymen sparing surgery for imperforate hymen; case reports and review of the literature. J pediatrAdolesc Gynecol. 2009;22(4):e61–e64. [PubMed] [Google Scholar]
[4] Dane C, et al. Imperforate hymen-a rare cause of abdominal pain: two cases and review of the literature. J pediatrAdolesc Gynecol. 2007;20(4):245–247. [PubMed] [Google Scholar]
[5] Liang CC, et al. Long-term follow-up of women who underwent surgical correction for imperforate hymen. Arch Gynecol Obstet. 2003;269(1):5–8. [PubMed] [Google Scholar]
[6] Ayaz UM, et al. Ultrasonographic diagnosis of congenital hydrometrocolpos in prenatal and newborn period: a case report. Medical ultrasonography. 2011;13(3):234–236. [PubMed] [Google Scholar]
[7] Ercan CM, et al. Imperforate hymen causing hematocolpos and acute urinary retention in an adolescent girl. Taiwanese Journal of Obstetrics and Gynecology. 2011;50(1):118–120. [PubMed] [Google Scholar]
[8] Khan Z.A, et al. Imperforate hymen: a rare case of secondary amenorrhea. J ObstetGynaecol. 2011;31(1):91–92. [PubMed] [Google Scholar]
[9] Lui CT, et al. A retrospective study on imperforate hymen and hematocolpos in a regional hospital. Hong Kong J emerg med. 2010;17(5):435–440. [Google Scholar]
[10] Abu-Ghanem S, et al. Recurrent urinary retention due to imperforate hymen after hymenotomy failure: a rare case report and review of the literature. Urology. 2010;78(1):180–182. [PubMed] [Google Scholar]
[11] Kloss BT, et al. Hematocolpos secondary to imperforate hymen. Int J Emerg Med. 2010;3(4):481–482. [PMC free article] [PubMed] [Google Scholar]
[12] Kurgodlu Z, et al. Spontaneous rupture of the imperforate hymen in an adolescent girl with hematocoplometra. ISRN obstetrics and Gynecology. 2011;2011:520304. Epub 2010 Sep 29. [PMC free article] [PubMed] [Google Scholar]
[13] Mou JWC, et al. Imperforate hymen: cause of lower abdominal pain in teenage girls. Singapore Med J. 2009;50(11):e378–e379. [PubMed] [Google Scholar]
[14] Drakonaki EE, et al. Hematocolpometra due to an imperforate hymen presenting with low back pain. J Ultrasound Med. 2010;29(2):321–322. [PubMed] [Google Scholar]
[15] Anselm OO, Ezegwui UH. Imperforate hymen presenting as acute urinary retention in a 14-year old Nigerian girl. J Surg Tech case Rep. 2010;2(2):84–86. [PMC free article] [PubMed] [Google Scholar]
[16] Shen MC, Yang LY. Imperforate hymen complicated with pyocolpos and lobar nephronia. J Chin Med Assoc. 2006;69(5):224–227. [PubMed] [Google Scholar]

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