

Case Report

Imperforated Hymen with Huge Abdominal Mass - A Rare Case

Madhubala Chouhan, Pinky Rachhoya

Department of Obstetrics and Gynaecology,
R. N.T. Medical College, Pannadhai Mahila Chikitsalaya, Udaipur, Rajasthan, India.

Corresponding Author: Pinky Rachhoya

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ABSTRACT

Imperforated hymen is a rare presentation in peripubertal girls. Imperforate hymen is the most common obstructive congenital abnormality of the female genital tract. We report a case of 14 years girl present with cyclical abdominal pain, backache and primary amenorrhoea with huge mass per abdomen.

Keywords: Imperforated hymen, Primary amenorrhoea, huge abdomen mass, Haematometra, Haematocolpos.

INTRODUCTION

An imperforated hymen is due to failure of the endoderm of the urogenital sinus to completely canalize. Imperforate hymen is relatively rare presentation with the incidence of about 0.1% of all new born female babies but it is the commonest lower female genital tract obstructive abnormality. [1-3] The incidence of imperforate hymen is 1 in 2000 girls, and approximately half of these will present with urinary retention. [4] Haematocolpos is a rare condition, where the vagina is filled with menstrual blood, caused by uterovaginal pathologies such as an imperforate hymen. There can be delayed diagnosis of this condition as the patient remains asymptomatic for a long time and symptoms can present with one or more of variety of symptoms. Symptoms can range from mild abdominal pain and tenesmus to urinary retention and a palpable lump in abdomen due to haematometra and haematocolpos. Haematocolpos is a rare condition seen with imperforate hymen or vaginal atresia in peripubertal age, where the vagina is filled with menstrual blood. [5]

CASE REPORT

We report a case of 14-year-old girl presented to gynecology department with backache for 9 months and strenuous since fifteen days. She had history of cyclical abdominal cramping pains in the preceding three months but denied having started menses. She also had upper gastrointestinal endoscopy for pain abdomen which had non-significant findings. There was no history of vomiting, change in bowel habit, fever and urinary retention. Her birth history and developmental history were unremarkable. On per abdominal examination revealed non tender mass of 28 weeks gravid uterus. On local examination of vulva there was a thick bluish-grey bulge posterior to the urethra. Perrectal examination revealed an anterior mass. All blood examination was unremarkable.

An ultrasound whole abdomen showed a homogenous hypoechoic mass lesion of size 19.64x8.73cm is seen in pelvis which was consistent with a haematometra and haematocolpos. The right kidney showed hydronephrosis with hydroureter

due to huge mass. Urinary bladder was empty. No other abnormal findings were detected.

In operation theatre, she underwent a hymenotomy (using a cruciate incision) under general anaesthesia and approximately 1500ml of thick chocolate

coloured blood evacuated. The edges of the hymen were everted and anchored by Vicryl 2/0 sutures. Prophylactic oral antibiotics were prescribed. She made uneventful recovery and, she has started experiencing normal menses.



Fig -1: showing imperforated hymen.



Fig -2: showing drainage of haematometra after hymenotomy.



Fig -3: USG showing hematometra.

DISCUSSION

Imperforate hymen is a rare genital tract anomaly which has an incidence of about 1 in 2000. [4] The hymen membrane is a vestigial membrane which is present at the junction of the sinovaginal bulb and the urogenital sinus. Normally, during 8th week of gestation it ruptures partially at the inferior portion, to establish connection between the vaginal lumen and exterior. When there is complete failure of the inferior end of the vaginal plate to canalize, then diagnosis of imperforate hymen is

made. The function of the hymen is not so much clear but thought is that, it provides a physical barrier to infections during the pre-pubertal period when the vaginal immunity is not fully developed. [6]

Presentation of imperforated hymen have varied spectrum that includes, cyclic abdominal/pelvic pain, abdominal distension, amenorrhea (primary or secondary), urinary outflow obstruction, constipation, tenesmus, edema of the lower limbs and a bluish bulging hymen. [7-9] Imperforated hymen diagnosed most commonly at puberty as these patients develop accumulation of menstrual blood within the vagina and occasionally within the uterus. [7] In most of cases of imperforated hymen patient came early with complaint of urinary retention. In this case cause of delay in diagnosis or huge mass per abdomen probably because of (1) absence of urinary retention, (2) backache which is rare presentation, (3) thick hymen causes retention of such large amount [approx. 1500ml] of menstruating blood. Treatment of imperforated hymen is establishing vaginal outflow and mainly consists of

surgical hymenotomy under anaesthesia. Simple vertical, T-shaped, cruciform, X-shaped and cyclical incisions may be used. X-shaped incision has the advantage of reduced risk of injury to the urethra-which should be stented during the procedure. [10]

CONCLUSION

Imperforate hymen is rare case but it is the most common anomaly of the female lower genital tract. The clinical presentation varies from patient to patient depending on the age at diagnosis. It may presents with acute pain abdomen, haematocolpos, haematometra, or urinary retention. So, Imperforated hymen is treated by surgical hymenotomy.

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