



Imperforate hymen- Can it be treated by a simple vertical incision –A case report.

KEYWORDS

imperforate hymen, hymenotomy, cyclic pelvic pain

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ABSTRACT Imperforate hymen is a rare congenital anomaly ,with an incidence of 0.05%-0.1% , although is the most common obstructive congenital anomaly of the female genital tract.It is thought that cause of this anomaly may be congenital defect in the degeneration of central cells of hymen. Generally it presents as an isolated anomaly , but some times genitourinary anomalies may be seen with it.

Patients are generally asymptomatic until menarche . Patients may present with primary amenorrhea ,cyclic abdominal pain, urinary retention ,suprapubic lump and tenesmus. Diagnosis is made with history and pelvic examination . Surgical treatment for this anomaly is hymenectomy after a cruciate or x shaped hymenotomy incision. Here we are reporting a case of imperforate hymen treated with a more conservative surgery which involved a simple vertical incision(hymenotomy) .Post operative follow up was uneventful and patient attained normal menses. Hence It could be an alternative option as it is a hymen sparing procedure which involves preservation of hymen and so maintains integrity of female genitalia . This procedure is more acceptable by the patient and their families.

Introduction

Imperforate hymen is a rare congenital anomaly of female genital tract and is observed in 0.01-0.5 % of new born. ^{1,2} It is a developmental defect in which there is defective degeneration of central cells of hymen. It is generally regarded as an isolated congenital anomaly , sometimes genitourinary anomalies may be seen with it. These patients remain asymptomatic until puberty ,when they present with the complaints of primary amenorrhea ,cyclic abdominal pain, suprapubic bulge, urinary retention, tenesmus and constipation.^{1,3}

Diagnosis is made easily by simple genital examination in which bluish bulging hymenal membrane is found. It usually manifests as a sporadic case , however familial inheritance has also been reported.²

Approximately 58% of patients may complain of pain while urinating and retention of urine because of collection of menstrual blood in the vagina (hematocolpos).Untreated or late treatment may result in complications like infertility, endometriosis and adhesions.⁴

Standard treatment of this condition is hymenectomy after a cruciate incision or x shaped hymenotomy incision .An intact hymen is important in some cultures and religions. Patients and families have fears about losing virginity after surgical interventions.

We report a cases admitted to our emergency wwith retention of urine, was diagnosed as a case of imperforate hymen ,and was treated with a conservative hymen sparing surgery with single vertical hymenotomy incision . The procedure is less invasive than other methods described in the literature and more comfortable for the patients.

The aim of this case report is to show simple virginity preserving socially acceptable procedure to provide an intact hymen.

Case report

A 16 year old female came to our surgery department with the complaints of severe abdominal pain and retention of urine for 2 days . she suffered twice with the same episode of acute retention of urine with abdominal pain for the past three months . For this she was catheterised in some other hospital . she also had not attained menarche. No other significant history was found in personal and family history. On her physical examination secondary sexual characters were normally present. On local pelvic examination it was noted that hymenal opening was not there, instead a bluish bulge was there. An USG scan showed a large mass posterior to her bladder suggesting haematocolpos. Bilateral ovaries were normal. She was catheterised and underwent hymenotomy by simple vertical incision under general anaesthesia because of patient's preference. .Approx 600 ml dark colored tarry blood was suctioned . foleys catheter no 16 f was inserted for one week.Post operative period was uneventful. She was discharged and followed up after one and a half months. She started having normal menses and was doing well. There was no stenosis or infection.

Discussion-

The incidence of imperforate hymen in newborn has been found to be a rare congenital anomaly, with the reported incidence of 0.05%-0.1% .It is thought to be a developmental defect in which due to defective degeneration of central cells of hymen , it remains imperforated.This condition causes collection of menstrual blood behind imperforated hymen at menarche. Patient are usually not asymptomatic until puberty. At puberty they typically present with cyclic abdominal pain and primary amenorrhea. Other complaints are urinary retention, back pain and constipation.

These patients are easily missed when they present with retention of urine in emergency department. Proper history and pelvic examination is not done like it was seen in our patient in which patient had two previous episodes of urinary retention in which catheterisation was done but con-

dition remain undiagnosed.

It is interesting that patient was catheterised twice before coming to us but the nurse who catheterised did not notice the abnormal bluish bulge that was enough for diagnosis, neither the doctor suspected the possibility of imperforate hymen.

Acar et al reviewed 65 cases and found average age of 14 years at the time of diagnosis and hematocolpos was inconsistently present.^[5]

Standard surgical procedure for this condition is hymenectomy using cruciate incision. but in our case we performed hymen sparing surgery in which single vertical incision was used and hymen was not cut.

Hymen sparing surgery was done primarily by M Basaran who treated cases with simple vertical incision. They used few oblique suture to prevent refusion.^[6] In our case we did not use sutures instead Foleys catheter was inserted for one week.

Temizkan et al also did virginity sparing surgery for imperforate hymen in two patients. They did simple central excision of the hymen leaving an intact annular hymen, but they did not use Foleys catheter. No restenosis was seen in their patients.^[7]

Acar et al did central oval incision with insertion of 16 F Foleys catheter for two weeks in 65 patients and found equally good results.^[5]

Cheli et al conducted a study in which radial incision technique was applied on 3 out of 5 cases. In rest of two cases hymenotomy procedure with simple excision was performed and foleys catheter was inserted^[8], as was done in our case.

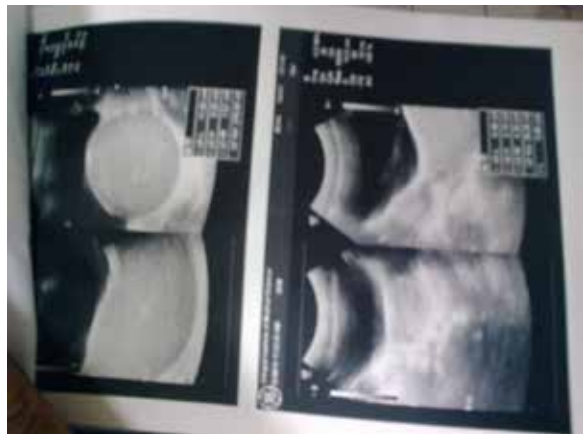
Ali A et al did simple central excision of the hymen making an annular intact hymen using a Foleys catheter for two weeks in order to prevent restenosis.^[9]

In our case we gave simple vertical incision. after drainage of blood from the vagina, Foleys catheter 16F was put for one week and then she was discharged. There was no stenosis and infection in the follow up and patient resumed normal menses.

Conclusion-

As standard surgical procedure for imperforate hymen is cruciate incision over the bulging hymenal membrane. Another method could be single vertical incision, as was done in this case. This hymen sparing procedure seems to be more acceptable by most of the patient as it involves preservation of hymenal tissue. The result of one cases is not sufficient to provide a conclusion so studies with large number of cases are required to show the efficacy of procedure, so that it will have world wide acceptance

Pic 1. showing bulging bluish membrane of hematocolpos.



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