

Successful hymenectomy in a young girl in imperforate hymen

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Abstract

An imperforate hymen may exist at the lower end of the vagina. This is due to failure in breakdown of the partition between the mullerian and sinovaginal bulb, contributing to the formation of vagina. We are presenting a case of a fourteen-year girl who was diagnosed as haematocolpus with imperforate hymen from history and clinical examination. Diagnosis was reconfirmed with abdominal ultrasonogram after evacuation of bladder, who had urgent surgical treatment (incision and excision) and relief of symptoms of lower abdominal pain and inability to pass urine.

Keywords: Imperforate hymen; haematocolpus; surgical treatment.

Introduction

Haematocolpus can occur when there is a failure in breakdown of the partition between the mullerian and sinovaginal bulb contributing to the formation of vagina. Once the diagnosis of hematocolpus is made, surgical treatment is urgently required to relieve patient from distressing symptoms such as acute abdominal pain and acute retention of urine and to prevent from later complications as pelvic endometriosis and infertility. Since every menstrual episode further dilates the genital tract and threatens permanent impairment of reproduction, these abnormalities of vertical fusion are seldom recognized clinically until puberty¹, when the uterus begins to menstruate, the blood remains behind the obstruction in the vagina. The amount of blood gradually increases and in course of months or years distends the vagina with blood and presents as haematocolpus. The greater distensibility of the vagina in adolescence probably protects patients with haematocolpus from other complications as haematometra, haematosalpinx, pelvic endometriosis and infertility and it's seen that subsequent menstrual history and fertility of patients are not significantly different from that of normal woman, provided the surgical treatment is done reasonably early.

Case Report

A 14-year old girl, not married was admitted with a history of inability to pass urine and lower abdominal pain for 10 days. Her menarche had not started.

She had no history of fever, burning micturation, constipation, bleeding per rectum and no past and family history of tuberculosis. On examination her vitals were within normal limit and her secondary sexual characters were well developed.

On abdominal examination, a low abdominal solid mass of 4X3 cms suprapubically was present. The mass was dull on percussion, mobile, non tender and no free fluid in the abdomen after evacuation of bladder with catheter. Per vulval examination, hymen was intact and was bulging, pale, tense and fluctuating. On per rectum examination; a bulging mass around 2 cm, firm in consistency on the anterior wall of the rectum in the vagina above the anal opening was felt. Ultra sonogram revealed 2 cystic masses in the uterus of 8X13 and 4X16 cms and ultrasonogram-guided aspiration revealed blood and diagnosis of haematocolpos was confirmed.

She was taken to operation theatre and under ketamine, anesthesia approximately 2 cms vertical incision was given in the bulging mass. After drainage of approximately 1 litre of chocolate coloured fluid, transverse incision approximately 2 cms in the midline of vertical incision was given, and redundant membrane was excised. Clean pad was applied in the vulva and transferred to ward. There were 4-5 pads soaked with dark coloured blood on the day of operation, 3-4 pads were soaked the next day. On the 2nd post operative day soakage was slight. She was discharged as she was afebrile, vital signs within normal limit and voided urine on her own.

She came to out door patient for follow-up after a week. She did not have any complaints. No mass palpable an abdominal examination. On vulval examination, there was no discharge and the annular opening in the hymen was present. She was voiding normally. She was advised to come postmenstrually.

Discussion

Complete imperforate hymen may occur at the lower end of the vagina and it is only after the uterus begins to menstruate, with

each monthly discharge the vagina fills with blood, which remains fluid. Some of its water content is continuously being absorbed, so blood becomes inspissated. Nevertheless, the amount gradually increases and in the course of months or years distends the vagina and forms haematocolpos. There can be variations in hymen development to occur, complete failure to perforate in hymen is rare and in such incomplete imperforate hymen, haematocolpos usually does not occur. Burd G *et al*² found the incidence of imperforate hymen to be 28.2% in 46 young adolescence associated with other abnormalities of the lower genital tract. LY Wet *et al*³ had the incidence of 46% in 24 girls who had unilateral occlusion of duplicated uterus with ipsilateral renal anomaly. When haematocolpus is formed and not treated, other complications due to collection of large quantity of blood in the vagina (haematocolpus), can occur later. Blood can get collected in the cervix, uterus (haematocervix, haematometra) and in the tube (haematosalpinx). Adhesion formation within or at the fimbrial end of the tubes can be seen then, and little or no blood may enter the peritoneal cavity. At times blood passes freely into the peritoneal cavity forming haemoperitoneum and pelvic endometriosis. When large quantity of blood distends the vagina, then a tumour is formed which fills the pelvis and extends into the lower abdomen and may cause lower abdominal pain, discomfort in the pelvis and pain in the lower back. Urination also can be difficult with symptoms of dysurea, frequency, urgency and at times there can be acute retention of urine.

Once the diagnosis of hematocolpus is made, prompt surgery is urgently required. Surgery is usually very simple, all that is required is incision of the membrane and release of retained blood. Redundant portion of the membrane maybe snipped away. After incising the hymen, unnecessarily intrauterine instrumentation should be avoided because of the risk of perforating the overstretched uterine wall and to avoid infection of the retained fluid. While making excision, the hymenal tissue should not be excised close to the vaginal mucosa and hemostatic suture around the excised hymenal membrane should not be applied in order to prevent scarring and stenosis.⁴

As long as the diagnosis is made reasonably early, treatment is simple. The subsequent menstrual history and fertility of patients who are successfully treated are probably not significantly different from that of normal women; although patients who develop endometriosis may have some fertility problems.

We presented a successful case of simple incision and excision in imperforate hymen, who was relieved with her symptoms of inability to pass urine and lower abdominal pain due to haematocolpus.

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