

Vaginal Obstruction after Excision of a Transverse Vaginal Septum: A Rare Case Report.

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ABSTRACT

A vaginal obstruction often occurs as a result of complication in women who had previously undergone an excision of a transverse vaginal septum. Here we are reporting a case of 12 years old unmarried girl presented with complaint of secondary amenorrhea and cyclic pain lower abdomen since two months. She was operated for cryptomenorrhea four months back. On examination under anaesthesia Thick scarred septum was present in vaginal canal about 6-7 cm from vaginal introitus. After sharp dissection hematocolpos bulge seen and drained, residual scar tissue excised, posterior and anterior vaginal wall reconstructed. Vaginal mould inserted to maintain patency.

Keywords: Transverse vaginal septum, Excision, Cryptomenorrhea.

INTRODUCTION

A vaginal septum is caused by incomplete fusion of the separating tissue between the fused Mullerian ducts and the vaginal plate. Prevalence of this congenital abnormality is 1 per 30,000 to 84,000 women. [1]. Clinical examination, ultrasound, and magnetic resonance imaging (MRI) are all used in diagnosis and pre-operative planning [2]. Vaginal obstructions also often occurs as a complication in women who had previously undergone an excision of a transverse vaginal septum. Women who experience vaginal obstruction often seek a doctor help with complaints of a cyclic lower abdominal pain, an amenorrhea and a previous history of vaginal surgery [3]. Here we are reporting a case of 12 year old unmarried girl, who presented with vaginal obstruction after excision of a transverse vaginal septum.

CASE REPORT

A 12 year's old unmarried girl was operated for cryptomenorrhea in March 2016 at some tertiary hospital. As per records transverse vaginal septum was excised and vaginal edges were sutured, hematocolpos and hematometra was drained.

Thereafter her bleeding was continued till one month. She presented in our hospital after two months with complaint of secondary amenorrhea and cyclic pain lower abdomen since two months. No other significant past or family history.

On examination, her vitals were stable, height was 140cm, weight was 40kg, BMI was 19.73 Kg/meter², her breast was tanner stage 3, pubic and axillary hairs were present. On Per abdomen examination: abdomen was soft but tenderness present in hypogastric region. Local examination revealed a normal introitus, urethral opening was normally positioned anterior to the vaginal opening. Per vaginal examination was avoided. On per rectal examination: there was a bulge felt anterior to the rectum and uterus was found to be normal size, no adnexal mass was palpable.

On investigations blood count, RFTs, LFTs, RBS, urine analysis were in normal range. Serum TSH and prolactin levels were normal. On USG hematocolpos and hematometra was present (Figure1) and bilateral kidneys also were normal. Patient was managed with I/V antibiotics and examination under anesthesia (EUA) was planned. During patient was taken in lithotomy position. On examination: a thick scarred septum was present in the vaginal canal about 6-7 cm from the vaginal introitus. After a sharp dissection, a hematocolpos bulge was seen and drained (about 250 ml of altered color blood). Incision was widened, residual scar tissue excised, posterior and anterior vaginal walls were reconstructed. Patent vagina of size, 8cm length and 2.5 cm width was achieved. A vaginal mould was

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inserted to maintain the patency. Antibiotics and analgesics were continued in post-operative period. Vaginal mould was changed once a day in post-operative period. Mother was taught the post-operative care and usage of vaginal mould with full asepsis. Patient was discharged on 6th post-operative day under good condition with advice to use vaginal Mould continuously for 2 weeks and then only at night for 6 months to prevent rescarring of vagina.



Figure 1: Ultrasound picture showing hematometra and hematocolpos.

DISCUSSION

A transverse vaginal septum is the vertical fusion defect of the müllerian system caused by incomplete fusion of the tissue that separates the vaginal plate and the caudal end of the fused müllerian ducts. The prevalence of this anomaly is reported to be 1 in 30,000 to 1 in 84,000 making this anomaly to be one of the rarest encountered in the female genital tract [4]. The etiology of vaginal septa is unknown but may be multifactorial in origin, due to exposure to agents in utero, or associated with autosomal recessive inheritance [5]. It occurs in any portion of the vagina and can be transverse, longitudinal, or oblique. The majority of vaginal septa are located in the upper and middle third of the vagina; and thicker septa usually are closer to the cervix [6]. Complete transverse vaginal septum cause primary amenorrhoea, haematomata, haematocolpos. Incomplete vaginal septa or perforate septa presents with hypomenorrhoea, dyspareunia and infertility. Differential diagnosis of transverse vaginal septum includes vaginal agenesis or aplasia. Endometriosis is found in these patients due to retrograde menstruation but is reversible with treatment [7]. An unobstructed septum is more common than an obstructed septum. High degree of suspicious towards these rare malformations should lead to early diagnosis [3]. Treatment involves surgical resection of the septum and anastomosis of the proximal and distal vaginas. This can be performed vaginally, laparoscopically, or via an abdominoperineal approach, depending on the location and thickness of the septum [8, 9]. High and

thick vaginal septum leads to inappropriate anastomosis leading to high chances of stenosis. Handling a vaginal obstruction after a surgery is quite difficult because of the risk of recurrence is up to 15-20% [3]. The success of the treatment depends not only on the surgical technique, but also on the post operation maintenance. A foley's catheter for two weeks after septum excision can prevent stricture formation [10]. Use of mould properly for one year depending on patient can prevent restenosis. Z plasty can be used effectively to treat restenosis or stricture. Obstructing vaginal malformations impede the outflow of menstrual blood flow and can cause hematocolpos, hematometra and hematosalpinx, thus increasing the likelihood of retrograde menstruation. Restenosis is the most common complication [11]. Moreover endometriosis and infertility are the most noticeable late consequences described with vaginal obstruction and have been claimed to occur earlier in cases of high transverse vaginal septum. The incidence of endometriosis in the general population is approximately 10%, and this is known to be significantly increased in obstructed Müllerian anomalies thought to be secondary to retrograde menstruation. Corrective surgery for the obstructed anomaly has been found to result in the complete resorption of the endometriosis. Rock et al. reported that patients were less likely to conceive after surgical correction if their transverse vaginal septum was located in the upper or middle third of the vagina. If they did succeed, 50% of pregnancies ended in spontaneous abortions. Dyspareunia, menstrual irregularities, fertility complications, and preterm labor are not uncommon [12].

CONCLUSION

The infrequent and variable presentation may result in delayed diagnosis and incorrect management. Early diagnosis can be based on proper history and gynecological examination. Strict follow up to be emphasized as it carries higher risk of restenosis leading to recurrence. Recurrent fibrosis is a major problem requiring re-surgery disturbing the quality of life of patient as happened in this patient. Patients should be educated about the potential long-term complications and the need to closely follow up with their provider especially when trying to become pregnant.

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