

Transverse Vaginal Septum in Upper Part of Vagina and Secondary Infertility

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ABSTRACT

A 30 years old female married for seven years, para 1, presented with history of secondary infertility for six years. She had a previous section. Cervix could not be felt or seen on pelvic examination. Diagnostic laparoscopy was planned. A micro perforated transverse vaginal septum was seen in the upper part of vagina and septectomy was done.

Keywords: Micro perforated septum, septectomy, transverse vaginal septum

INTRODUCTION

A transverse vaginal septum represents failed canalization of the vaginal plate. This condition occurs in approximately one of every 18000-30000 women. The septum can be located at any of the various levels in vagina, about 40% are found in the upper vagina, 35-40% in the middle portion and 15-20% in the lower vagina^{1,2}.

The septum varies in thickness and clinical presentation depends upon whether it is complete or partial. The presentation of the complete septum is either in neonatal period with mucocolpus or at after puberty with pain and/or amenorrhea and pelvic mass which are caused by haematocolpus, haematometra and haematosalpinx³.

In an incomplete septum is usually asymptomatic and therefore does require correction during childhood or adolescence. The central aperture allows for menstrual blood and vaginal secretions from vagina⁴.

Transverse vaginal septum may lead to significant vaginal lacerations or to a cesarean delivery. There have been cases in literature where the vaginal septa were first time diagnosed during pregnancy⁵. Such a stricture is occasionally mistaken for upper limit of vaginal vault and at the time of labour. The opening in the septum is erroneously considered to be an undilated external os and the patient may be subjected to cesarean section due to failed progress of labour. This current paper presents a unique case in which a patient with transverse vaginal septum had history of normal menstruation. She conceived for the first time without any problem. She underwent cesarean section for failed progress of labour and the presence of vaginal septum was overlooked. It was diagnosed accidentally during the workup for infertility and excised successfully.

CASE REPORT

A 30 years old lady presented in the outpatient department of Unit 4 Lady Aitchison Hospital Lahore in February 2013 with a history of secondary infertility for the last six years. She was married for seven years. Previously she had a caesarean section done in a private hospital for failed progress during labour. She had normal menstrual cycle of 3/28 days. There was history of mild dysmenorrhea and dyspareunia for years but there was no history of weight gain, acne, hirsutism, heat or cold intolerance, day intervention or any other chronic illness. General physical and systemic examination were unremarkable. In the local examination abdomen was soft nontender, external genitalia were normally developed. On per speculum examination cervix could not be visualized and there was normal vaginal discharge. The cervix could not be felt on bimanual pelvic examination. Her baseline investigations and the hormonal profile were within normal range. The semen analysis of the husband was normal and hysterosalpingography could not be done due to non visualization of cervix. She was scheduled to undergo diagnostic laparoscopy electively. In the laproscopic findings the uterus was 6 to 8 weeks size and retroverted. Both tubes and ovaries were healthy. Mild adhesions were noted. In local pelvic examination a high transverse vaginal septum was noticed with a very small hole in the lateral fornix

which could only be seen after dye instillation. It was decided to proceed to laparotomy. Adhesiolysis was done, uterus was mobilized and dye test done through uterine cavity. Bilateral spillage of dye was seen. Combined abdominovaginal approach was adopted and septectomy was done (Fig A). The post operative course of the patient was uneventful. She underwent vaginal packing daily for one week and was discharged with an advice for regular follow up.



Fig A. View after septectomy

DISCUSSION

A case of unusual presentation of Mullerian anomaly is described in this paper. The internal duct system of the female reproductive organs arises from different primordi and in close association with a urinary system and hind gut. Paired Mullerian ducts grow and meet in the mid line becoming fused in the urogenital septum. The cranial parts of mullerian ducts remain separate and form the fallopian tubes whereas the caudal segments fused to form the uterus and part of vagina. Sinovaginal bulbs originating from the urogenital sinus extend cranially to join with the caudal end of the fused Mullerian ducts forming the vaginal plates. It is thought that only the upper 1/3 of vagina is formed from the Mullerian ducts and lower vagina forms from vaginal plate of urogenital sinus⁶.

Uterovaginal anomalies are classified into three groups. The first group is agenesis of uterus and vagina (Mayer-Rokitansky-Kuster-Hauser Syndrome) and due to dysplasia of Mullerian ducts with absence of normal uterus and most or all of the vagina. The second group, disorders of vertical fusion result from faults in the junction between the downward growing Mullerian ducts and upward growing derivatives of urogenital sinus, the sinovaginal bulbs. The group includes transverse vaginal septum and cervical agenesis. The third group consists of disorders of lateral fusion of the true Mullerian ducts and failure of absorption of the uterine septum⁷.

Delaunay first described the transverse vaginal septum in 1877⁸. The prevalence of this anomaly is reported to be 1 in 30000 to 1 in 84000^{9,10}. The cause is unknown, although some cases may be the result of a female sex limited autosomal recessive transmission¹¹.

A wide variety of Mullerian abnormalities has been described in the literature. Various combinations of the anomalies may co-exist in a single subject¹².

It is suggested that examination of the female external genitalia should be undertaken at birth. Delayed detection is not infrequent and can result in major risk to the patient because of urinary tract anomalies and pelvic endometriosis. It may also be a rare case of obstructed labour. Vaginal septum can be removed by simple minimal surgery. The micro perforated vaginal septa may remain undiagnosed during routine gynaecological examination and investigations like laparoscopy may aid in their diagnosis and management.

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