

CASE REPORT

TRANSVERSE VAGINAL SEPTUM DIAGNOSED DURING LABOR: A CASE REPORT

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ABSTRACT:

Transverse vaginal septum is a rare congenital utero vaginal anomaly with a frequency of 1 in 70,000 females. This septum is a membrane of fibrous connective tissue. The patients usually have normal hymenal opening. These septa may be without an opening (complete or obstructed) or may have a small central aperture (incomplete or non-obstructed). They are usually found in the mid-vagina but may occur at any level. This defect presumably is caused by failure of absorption of the tissue that separates the two, or by failure of complete fusion of the two embryologic components of the vagina. A high index of suspicion is necessary to diagnose this type of disorder. Gynecologists should be aware of the possibility of transverse vaginal septum in women in labor who become pregnant from a small central aperture. In the present study, we describe a case of untreated transverse vaginal septum with small central aperture diagnosed during labor with successful pregnancy outcome.

Key words: Septum, Transverse, Vaginal

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INTRODUCTION:

Transverse vaginal septum is a rare congenital utero vaginal anomaly with a frequency of 1 in 70,000 females.¹ This septum is a membrane of fibrous connective tissue. The patients usually have normal hymenal opening. These septa may be without an opening (complete or obstructed) or may have a small central aperture (incomplete or non-obstructed). They are usually found in the mid-vagina but may occur at any level.²

Transverse vaginal (transvaginal) septum (TVS) is a type of rare congenital utero-vaginal anomaly (class II under the Rock and Adam classification). The clinical presentation of the case of a complete septum, commonly present with primary amenorrhoea and cyclic pelvic pain. The condition is rarely diagnosed in neonates or infants unless the obstruction causes significant hydromucocolpos. Clinical examination of the vulva is normal if the septum is in the middle/upper vagina. If a membrane is visible it will transilluminate unlike an imperforate hymen.³

Pathologically, it is a type of vertical fusional defect. A transverse vaginal septum is either perforated (incomplete) or imperforate (complete) and results from varying degrees of failure in reabsorption of the tissue between the vaginal plate and the caudal aspect of the fused Mullerian ducts.⁴ The septum is a fibrous membrane of connective tissue with vascular and muscular components, as a result of which the functional length of the vagina is reduced. While it may occur in isolation it is often combined with other mullerian duct anomalies such as uterus didelphys.⁵

The transverse vaginal septum can occur at almost any level of the vagina. Reported prevalence in terms of position includes:

- Superior vagina (~46%)
- Mid-vagina (~40 %)
- Inferior vagina (~14%)

USG is the diagnostic aid to define the anatomy of female genital tract and hence can readily be used to diagnose TVS.⁶

Treatment modalities of transverse vaginal septum vary with its condition. An incomplete septum which is asymptomatic does not require correction during childhood or adolescence since vaginal secretions and menstrual blood flow from vagina. Transvaginal septum requires surgical excision of fibrous septal tissue when the patient has complaints like infertility and dyspareunia. But risk of post-operative complications like stenosis or scarring of vagina can occur. After surgery, the patient may require vaginal dilator to avoid hour glass effect of the healing process.⁷

Hereby, we describe a case of untreated transverse vaginal septum with small central aperture diagnosed during labor with successful pregnancy outcome.

CASE REPORT

A 22-year-old primigravida at 38 + 5 weeks came to labor room in emergency hours with chief complaints of pain in abdomen and pv leak since morning. She was an unbooked patient with investigations of her ultrasonography done at 28 weeks of gestation which revealed no abnormalities. She was married since 11 months. Her menstrual history was regular with minimal flow lasting for 2–3 days.

On general examination, there was no pallor, icterus, cyanosis, or edema. On per abdominal examination, uterine height was term with cephalic presentation. Liquor was adequate for period of gestation, uterus irritable, fetal heart sound was regular (144/min). On

local examination, labia majora and minora were well-formed. On per speculum examination, vagina was blind pouch with 2 mm opening present in centre (Fig.1). Blood-stained mucoid discharge was seen coming out of that minute opening Urethral opening was normal.

On per vaginal examination, transverse vaginal septum felt with aperture in centre, finger insanguinated and cervix was 4-5 cm dilated, 50% effaced station at +1 (Fig. 2). So, the diagnosis of transverse vaginal septum was made and septum was separated with fingers. Patient gradually progressed to full dilatation and full effacement of cervix and station of head being at +2.



Figure 1: Vagina showing blind pouch with 2 mm opening present in centre



Figure 2: Transverse vaginal septum with aperture in centre

A male baby of weight 3.2 kg was delivered vaginally. Baby cried immediately after birth with Apgar score of 6, 7, and 8. Post-delivery period was uneventful. Mother and baby were discharged in good health and advised to come for follow up after 6 weeks.

DISCUSSION:

The case of an unusual presentation of Mullerian anomaly is described in this paper. Transverse vaginal septum is a rare diagnosis to make during labor and important to treat before uterine rupture. A transverse vaginal septum can develop at any location in the vagina but is more common in the mid-vagina, as in our case. This defect presumably is caused by failure of absorption of the tissue that separates the two, or by failure of complete fusion of the two embryologic components of the vagina.⁸

A complete septum usually presents after menarche with progressive abdominal pain during menses secondary to hematocolpos, similar to signs and symptoms of an imperforate hymen. Therefore, the diagnosis of a transverse vaginal septum is often delayed until after menarche, when menstrual blood is trapped behind an obstructing membrane.⁹

An incomplete septum is usually asymptomatic, and therefore does not require correction during childhood or early adolescence. The central aperture allows for vaginal secretions and menstrual flow from the vagina. Transverse vaginal septum during pregnancy may lead to significant vaginal lacerations or to a cesarean delivery. Surgical correction should follow an attempt to identify the extent of the lesion.¹⁰

Such a stricture is occasionally mistaken for the upper limit of the vaginal vault, and at the time of labour, the opening in the septum is erroneously considered to be an undilated external os. After the external os has dilated completely, the head impinges upon the septum and causes it to bulge downward.¹¹ If the septum does not yield, slight pressure upon its opening will usually lead to further dilatation, but occasionally cruciate incisions may be required to permit delivery, as in our case.

A high index of suspicion is necessary to diagnose this type of disorder. Gynecologists should be aware of the possibility of transverse vaginal septum in women in labor who become pregnant from a small central aperture.

CONCLUSION:

The transverse vaginal septum is a rare anomaly of benign nature which occurs during embryogenesis, due to defective vertical fusion of Mullerian ducts with urogenital sinus.

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