

Anteroposterior Vaginal Septum and Infertility: A Case Report

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ABSTRACT

Introduction: Mullerian and urogenital sinus abnormalities account for 3.5% as reason in women who have problems getting pregnant.^[1] It is very important to examine a lady, unable to have a baby so as not to miss such abnormality.

Aim: Birth defects of genital organs can prevent a lady from getting pregnant.

This case highlights this, as it was diagnosed at the age of forty. Inability to diagnose it early leads to delayed treatment.

Material and Methods: Lady with difficulty in getting pregnant reported to Obstetrics and Gynecology out-patient department. She was worked up to find out that an antero-posterior septum preventing her from getting pregnant by effectively blocking cervical opening to semen.

Results: Septum was successfully removed by surgery after confirming no bladder or rectal involvement.

Conclusion- Congenital defects are very obvious and treatable causes of infertility. They should be specially looked for and treated.

Keywords: Septum; Infertility; Urogenital sinus; Mullerian ducts; Vagina; Congenital

INTRODUCTION

Literature is full of transverse vaginal septum case reports. Antero-posterior vaginal septum is very rare. That is the reason to report this case^[2].

Superior portion of vagina comes from Mullerian ducts. Inferior portion of vagina comes from urogenital sinus. This part is difficult developmental step. Many developmental defects can occur during this period of formation of vagina. There for one should look for it in every lady who comes to Gynaecology out-patient department.

CASE REPORT

A lady who was forty years old came with primary infertility and secondary amenorrhoea. Significant male factor was present but it was found on examination a large fleshy septum was occupying whole vagina which was missed by other facility. This was not noted on pelvic Sonography. Husband is a labourer and chronic alcoholic tested positive for Hepatitis B.

Semen exam showed, 75 million/ml, amount 0.4ml, grade IV motility 14%,

Grade III motility 8%, grade II 2%, grade I 26%. Abnormal forms were 95% with head abnormalities being 45%, midpiece and neck abnormalities 20%, tail abnormalities 30%.

Keeping in mind significant male factor, complete history, general examination was done.

Menstrual history in the past revealed three to four monthly cycles with bleeding for three days. For last eight months she did not get menstrual cycles.

Small holes in transverse vaginal septum, have been reported where woman menstruates but coital difficulty and infertility occurs. Incidence of these abnormality is 1 in 70, 000 women^[3].

Sometimes a vaginal septum can cause pelvic pain^[4].

Transverse vaginal septum can also cause secondary amenorrhoea, as micro-perforations get blocked by blood clots and debris^[5].

Systemic examination was normal. Local examination revealed vaginal tag as shown in photo was fully occupying the vagina. It was thick fleshy and anteroposterior. Cervix could not be seen, only felt through septum. On per vaginal examination uterus was normal size with fornices having no lump. Sonography showed no urinary abnormality. Uterus 6.5x4x2.2 cm. Endometrium 5mm thick.

After investigating the patient she was posted for vaginal septum resection under anaesthesia, it was excised. Hysteroscopy showed one cervix and one uterine cavity.

As both partners are subfertile they will require assisted reproductive technology to help her achieve pregnancy^[6]. In GA after ensuring no part of bladder or rectum is invaginating into it.

DISCUSSION

Formation of vagina is a difficult developmental step for nature. It tends to perform this function inadequately resulting in formation of vagina full of fleshy mass instead of a completely canalized vagina. This interferes with access of sperms to cervical opening causing infertility.

CONCLUSION

Formation of vagina involves Urogenital sinus which is present for development of Urinary and Reproductive system. Urogenital sinus is ventral part of Cloaca formed after Cloaca separates from anal canal during fourth and seventh week of pregnancy. The Pelvic part of Urogenital sinus gives rise to sinovaginal bulb, structure that will eventually form lower third of vagina. This happens when lower tip of paramesonephric ducts, the structures that will eventually form uterus and vaginal fornices come in contact with urogenital sinus. Shortly afterwards the sinovaginal bulbs form two solid vaginal plate, which extends and canalizes (hollows) to form the inferior portion of vagina. The female urogenital sinus also gives rise to urethra and vestibule of vagina. The upper part of vagina develops from the Mullerian ducts.

The lower part of vagina developed from urogenital sinus.

Urogenital sinus is a part of human body only present in the development of Urinary and reproductive organs. It is the ventral part of cloaca, formed after the cloaca separates from anal canal during the fourth to seventh week

of development. The pelvic part of urogenital sinus gives rise to the sinovaginal bulbs, structures that will eventually form lower two third of vagina^[7].

This happens when lower tip of of paramesonephric ducts , the structures that will eventually form uterus and vaginal fornices come in contact with urogenital sinus. Shortly afterwards the sinovaginal bulbs form two solid vaginal plate, which extends and and canalizes (hollows) to form the inferior portion of vagina. The female urogenital sinus also gives rise to urethra and vestibule of vagina.

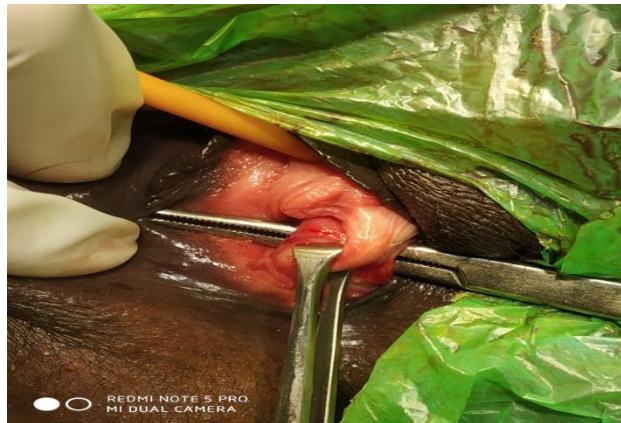


Figure 1: Showing anteroposterior septum.



Figure2: Showing cervix after removing anteroposterior septum.

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