

Case Report

Successful Pregnancy Outcome in a Patient with Complete Uterine and Longitudinal Vaginal Septum

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Abstract: Abnormalities of the female reproductive tract are associated with a multitude of antepartum and intrapartum complications but impact of each anomaly continues to remain ill defined. In the case that follows, we report a woman with rare Müllerian anomaly of complete septate uterus and longitudinal vaginal septum who conceived spontaneously and underwent uncomplicated pregnancy course. The uterine septum may not necessarily be transacted for patients who have this anomaly and meanwhile have no a history of poor reproductive outcome.

Keywords: Müllerian anomaly, Complete septate uterus, Longitudinal vaginal septum, Reproductive outcome.

INTRODUCTION

Müllerian anomalies comprise a heterogeneous group of genital malformations accounting for an incidence of 3–4 % in the general female population [1]. Exact incidence is difficult to estimate as patients with Müllerian anomalies are often asymptomatic. Also the prevalence varies depending on the specific population analyzed. The relationship between uterine anomalies and adverse pregnancy outcomes have long been established and includes recurrent miscarriage, premature delivery, preterm premature rupture of membranes, abnormal fetal presentation and increased rate of cesarean section [2].

Among different types of congenital uterine anomalies, the septate uterus is the commonest [3] and results from failed resorption of the midline uterine septum between the two fused Müllerian ducts. The fibromuscular septum that divides the uterine cavity and can extend all the way down into the cervical canal and can also be associated with a longitudinal vaginal septum. Pregnancy in women with complete uterine and vaginal septum is a relatively rare condition and the mode of delivery in these patients is unclear. We here report a case of complete uterine and vaginal septum who had a full term pregnancy and had a vaginal delivery.

CASE REPORT

A 28 year primigravida presented at 37 weeks gestation with pain abdomen for 10 hours and leaking

per vaginam since 8 hours. There was no history of fever, trauma, per vaginal bleeding or early pregnancy bleeding. She had antenatal checkups elsewhere which revealed that her prenatal care began at 12 weeks gestation without complications. Lab investigations were unremarkable. Ultrasonography performed at 24 weeks gestation revealed a singleton fetus with normal anatomy, normal amniotic fluid, and posterior placenta but no abnormality of the genital tract was detected. The patient's past medical and surgical history were unremarkable. She had no prior vaginal or uterine surgical procedures. She was married for two years, not used any contraception and had spontaneous conception. Her menstrual history was regular except for slight dysmenorrhoea and sometimes dyspareunia.

On admission her vitals were stable with pulse rate of 90 bpm, blood pressure of 126/ 82 mm of Hg and respiratory rate of 18 per minute. Rest general and systemic examination was within normal limits. On per abdomen examination, symphysiofundal height was 34 cm with cephalic presentation and reassuring fetal heart rate. On speculum examination, complete longitudinal vaginal septum with single cervix was seen (Fig. 1). A watery vaginal discharge was noted. After basic investigations, labour was induced in view of leaking of 8 hours with gestation more than 34 weeks. As the Bishop's score was unfavorable – prostaglandins were used. She delivered after 9 hours of induction with 35 min of second stage. During second stage the vaginal septum stretched and small cut at the area of maximal

stretch given, and the whole septum got lacerated at the delivery of the head. A 2.86 g infant was born in the cephalic presentation with Apgar scores of 8 and 9 at 1 and 5 min after birth, respectively.

Pelvic examination done after delivery revealed lacerated edges of bisected vaginal septum with minimal oozing which settled on pressure and no suturing was required (Fig. 2). Also a septum was felt in cervical canal (Fig. 3). Sonography done at 4 weeks postpartum confirmed the diagnosis of complete septate uterus which extended to the level of the cervix (Fig. 4).



Fig. 1: Per speculum examination showing complete longitudinal vaginal septum



Fig. 2: Per speculum examination showing lacerated edge of bisected vaginal septum



Fig. 3: Per speculum examination showing septum in cervical canal



Fig. 4: Ultrasonography showing postpartum septate uterus

DISCUSSION

Female genital tract anomalies are a unique subset of congenital malformations. During embryogenesis, the uterus, fallopian tubes, cervix, and upper two-thirds of the vagina develops from the müllerian ducts, while the lower third of the vagina forms from the ascending sinovaginal bulb. In general, complete formation of the genital tract is dependent on three stages: organogenesis, fusion, and septal resorption [4]. The American Society of Reproductive Medicine has classified Müllerian anomalies into seven categories: (i) hypoplasia or agenesis; (ii) unicornuate uterus; (iii) didelphic uterus; (iv) bicornuate uterus; (v) septate uterus; (vi) arcuate uterus; and (vii) T shaped uterus from diethylstilbestrol exposure [5]. Among different types of structural uterine anomalies, the septate uterus is the commonest [3] and results from failure of the resorption of the midline uterine septum between the two fused Müllerian ducts. The septum divides the uterine cavity and can extend all the way down into the cervical canal. So the uterine cavity may

be affected partially or completely, depending on the size of the septum. Longitudinal vaginal septums are associated with a uterine anomaly (septate or didelphys) in 95% of cases [6]. However, complete septate uterus with a cervical septum and longitudinal vaginal septum is a rare uterine anomaly [7].

Although congenital uterine anomalies have long been associated with adverse pregnancy outcomes, the exact role of these anomalies remains uncertain. Septate uterus however is associated with the highest incidence of poor obstetric performance. A compilation of studies of septate uteri identified a pregnancy loss rate of 44.3%, a preterm delivery rate of 22.4%, a term delivery rate of 33.1%, and a live birth rate of 50.1% [8]. The etiology of reproductive failure in patients with the septate uterus causes is not clearly understood. Implantation of the placenta over inadequately vascularised septum, distorted uterine cavity along with associated cervical incompetence have been implicated. However, a septate uterus is not always associated with poor obstetric performance; pregnancy may progress successfully without surgical treatment as is the case with our patient. Heinonen [9] reported that 49 women who had untreated complete septate uterus with longitudinal vaginal septum produced 115 pregnancies, only five women had miscarriages and 44 women had at least one delivery. Chen SQ [10] reviewed management and reproductive outcome of 21 women with complete septate uterus with duplicated cervix and vaginal septum and concluded that routine hysteroscopic transection of the uterine septum should not be performed in asymptomatic patients. Therefore, the finding of a septate uterus may not necessarily be an indication for surgical intervention.

CONCLUSION

To summarize, women with complete septate uterus with longitudinal vaginal septum have a good chance for normal pregnancy instead of absolute infertility problem or spontaneous miscarriage. Hence in women with this kind of genital tract malformation and no history of poor reproductive outcome, the septum can be left and need not be transacted always.

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