Transverse Upper Vaginal Septum Obstructing Labor: A Case Report

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A transverse vaginal septum is a rare congenital anomaly of the reproductive tract thought to arise from defective canalization of the vagina. If located in the upper vagina, these septa are likely to be incomplete and asymptomatic. In the lower vagina they may be obstructive and found at the time of menarche, similar to an imperforate hymen. However, some women with incomplete septa will not be diagnosed until their first pregnancy. Here, we describe the management and outcomes of patient with transverse vaginal septa first diagnosed during pregnancy, and review the obstetric literature pertinent to this condition.

Key Words: Transverse vaginal septum, Pregnancy, Obstruction of labor

Gynecol Obstet Reprod Med 2012;18:42-44

Introduction

The incidence of a transverse vaginal septum has been reported to be 1 in 70.000 females, making it one of the rarest anomalies of the female genital tract.[1] The transverse vaginal septum (vertical fusion and canalization defect) is a result of failure of absorption of the tissue between the vaginal plate and the caudal end of the fused Mullerian ducts. It may be located in the lower, middle, or upper part of the vagina.[2] Patients usually have symptoms related to coital problems or infertility. We report this case because it is a rare anomaly and should be fallen into account in pregnant patients whom cervix can not be visualized. Also, we describe the management and outcomes of a patient with transverse vaginal septa first diagnosed during pregnancy, and review the literature pertinent to this condition.

Case Report

A 19- year- old, 9 months married primigravida woman applied to our clinic at 20 weeks and 5 days gestational age, for legal pregnancy termination. The reason of termination request was multiple fetal anomalies diagnosed on obstetric scan. Patient's menarche had occurred at the age of 12 and she described regular menses with mild dysmenorrhea and dysparunia. Her physical examination showed normal female habitus and external genitalia, pelvic examination revealed a 7cm vaginal canal and a flush or absent cervix and speculum examination revealed a 3-5 mm opening hole. At first, this hole was considered to be cervical anomaly. 200µgr misoprostol vaginally 4 hours apart for 16 hours was used for pregnancy termination. Although she had vaginal bleeding and regular lower back pain, no cervical change was observed. Her transvaginal sonography showed that intrauterine gestation and shortening and dilated cervix behind a transverse vaginal septum. We planned septum resection to remove the obstruction. Under general anesthesia we inserted a Foley catheter (no: 16) through the small pinhole orifice in the upper vagina and injected 50 cc warm serum physiologic also urethral catheterization was performed. The edges of vaginal septum orifice were grasped with plasmakinetic bipolar coagulation (Gyrus Acmi G 400, Gyrus Medical Inc. USA) forceps laterally and bipolar vaporization was used to incise the septum bilaterally (Figure 1).

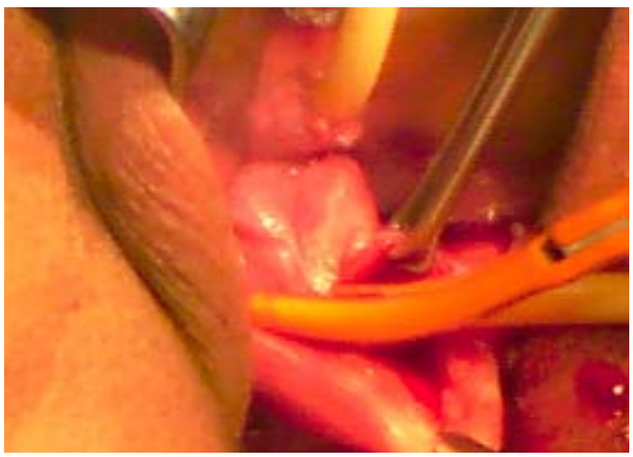

Figure 1: The edges of vaginal septum orifice were grasped with plasmakinetic bipolar coagulation forceps laterally and bipolar vaporization was used to incise the septum

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Submitted for Publication: *05. 04 2011*
Accepted for Publication: *20. 06. 2011*

The septum was approximately 0.5 mm in thickness. A normal cervix and amniotic membranes were visualized proximal to the septum (Figure 2).

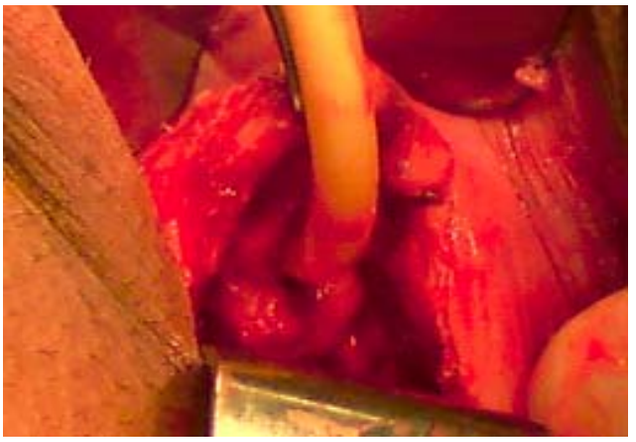

Figure 2: A normal cervix and amniotic membranes were visualized proximal to the septum

After this procedure delivery was occurred in 15 minutes. An intravenous pyelogram performed postoperatively was normal. On day 1 after surgery, the patient was discharged without any problem.

Discussion

The transverse vaginal septum is one of the rarest anomalies of the female tract. The etiology of transverse vaginal septum is unknown but it represents a failure of absorption of the tissue between the vaginal palate and the caudal end of the fused mullerian ducts.[3] The septum can be at any level in the vagina, approximately 46% being found in the upper vagina, 40% in the mid vagina and 14% in the lower vagina. Septa may be complete or incomplete and are generally less than 1cm in thickness. Suidan and Azoury stated that an incomplete transverse septum with a pinpoint hole in the centre was seen in reviewed 11 cases[4].

Endometriosis and infertility are the most prominent late consequences reported in vaginal obstruction especially complete vaginal septum[5], sometimes perforated vaginal transverse septum could lie behind the infertility[6]. Imperforate obstructive vaginal malformations can be easily diagnosed may be likely to cause retrograde menstruation. In these patients, cyclic pain, vaginal discharge, pelvic mass development, amenorrhea, or abnormal menstruation may be present at the postpubertal stage. These may limit tampon use and intercourse. However, some patients might be asymptomatic[7]. Perforate transverse vaginal septum is difficult to detect due to the absence of symptoms. In our case, the septum was located at the upper of the vagina and the patient had minimal complaints of dysmenorrhea and dysparunia and was diagnosed at first in the pregnancy. Some women with incomplete septa will not be diagnosed until their first pregnancy, and the ideal management of that pregnancy is unclear. In this situation, three basic management schemes for transverse septum. have been reported: 1) incision of the septum before labor[8] 2) prelabor or early labor cesarean delivery to avoid potential vaginal lacerations or obstruction to labor[9], and 3) expectant management with a plan of either allowing spontaneous dissection of the septum as a result of dilation of the cervix and descent of the fetal head, or incision late in labor, if needed, after the septum has thinned and pressure from the head can provide hemostasis.[6] The search on published reports revealed first documented cases diagnosed relatively late in pregnancy, described by Davids in 1939[10]. Both pregnancy continued to term and were actually delivered vaginally, with the septa divided just before delivery. The one descriptive account of incision before labor reported that a 14-year-old nulliparous patient underwent examination under anesthesia at 37 weeks and incision of what was found to be a transverse septum. When she later labored, the septum dilated to 7 cm and became obstructive. Incision of the septum was repeated, followed by rapid delivery. The authors opined that incision before labor was likely not optimal because it created scarring resulting in obstruction to labor, and thus required two separate operative interventions.[6] There are also cases reported of obstructive septa that were incised (and presumed obliterated) at menarche but that persisted into pregnancy.[11] In these cases prophylactic cesarean delivery to avoid injury or obstruction to labor with subsequent revision after delivery has been recommended. On the other hand Blanton and Rousea presented two cases with uncorrected lesions were managed in active labor with term gestations. Although both of the patients sustained some degree of anterior and posterior vaginal lacerations, they stated that resection or incision during labor resulted in acceptable outcomes and no clear evidence that supported cesarean delivery in transverse septum.[12] Magnetic resonance imaging may be useful to evaluate the pelvis preoperatively[3], the septal thickness can be noted and other associated anomalies although these anomalies are rare in vaginal obstructive malformations than longitudinal ones may be evaluated.

Our case showed that the importance of suspicious and careful evaluation of all pregnant women, because a rare asymptomatic congenital defect could obstruct the labor and cause uneventful outcome.

Doğuma Engel Olan Üst Transvers Vaginal Septum: Olgu Sunumu

Transverse vajinal septum reproduktif kanalın, vajenin defektif şekilde kanalizasyonu nedeniyle oluşan nadir görülen bir konjenital anomalisidir. Eğer bu septalar üst vajen yerleşimliyse genellikle inkomplettir ve semptom vermez. Alt vajende olduk-

larında ise obstrüktif olabilir ve imperfore hymen gibi ilk defa menarş zamanı farkedilebilirler. Bununla beraber bazı kadınlarda inkomplet septa ilk gebeliğe kadar teşhis edilemeyebilir. Burada ilk defa gebelik esnasında transvers vajinal septa tanısı konulan bir hastanın tedavisi ve sonucu anlatılarak bu durumla ilişkili obstetrik literatür gözden geçirilecektir.

Anahtar Kelimeler: Transvers vaginal septum, Gebelik, Doğumun engellenmesi

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