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Case Report

Vaginal delivery in case of an undiagnosed isolated longitudinal vaginal septum: a case report

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ABSTRACT

Isolated longitudinal vaginal septum is a rare Mullerian malformation that may be associated with dyspareunia, dysmenorrhea, primary amenorrhea and infertility. In this case report, the author presents a case of longitudinal vaginal septum in a 20 years old patient with full-term pregnancy whose diagnosis was only made during second stage of labor following vaginal examination. During delivery of baby the septum got lacerated anteroposterioly in the middle and it was resected after the delivery with subsequent suturing. Both mother and child progressed satisfactorily and were discharged from hospital in good health.

Keywords: Mullerian anomaly, Pregnancy, Vaginal septum, Vaginal delivery, Case report

INTRODUCTION

Development of the female genital tract is a complex process that is dependent upon a series of events involving cellular differentiation, migration, fusion, and canalization. Failure of any one of these processes results in a congenital anomaly.[1]

The sinovaginal bulbs are two solid evaginations originating in the urogenital sinus at the distal aspect of the müllerian tubercle. The sinovaginal bulbs proliferate into the caudal end of the uterovaginal canal to become a solid vaginal plate. The lumen of the lower vagina is then formed by degeneration of the central cells of this vaginal plate, which occurs in a cephalad direction. Canalization is typically complete by 20 weeks.[2] In recent decades, advances in imaging have facilitated diagnosis of mullerian duct anomalies, the incidence of which is estimated at 0.001 to 10%.[3]

A longitudinal vaginal septum is typically associated with uterine anomalies such as septate uterus or uterus didelphys. The septum may divide the vagina partially or completely. It may be asymptomatic or present clinically as difficulty in inserting tampons, persistent bleeding despite the presence of tampons, or dyspareunia.

CASE REPORT

A 20-year-old primigravida at 39+6 weeks of gestation came to district hospital Tehrathum, Nepal with complain of lower abdominal pain for 12 hours. She had received ANC follow up from local health post and had done USG in 20 and 33 weeks with normal reports. Her menstrual history is regular with minimal bleeding lasting for 3-5 days.

Initially after the starting of labor pain, she had gone to the local health post near by her house for delivery but she was referred from there to our district hospital after finding an abnormality on vaginal examination.

Physical examination revealed stable vital signs, term sized uterus with fetus in vertex presentation and fetal heartbeat of 150 beats per minute. There were three to five contractions lasting 30-45 seconds in the duration of ten minutes.

Digital vaginal examination revealed a cervix fully dilated and fully effaced. The membrane was intact with clear meconium upon rupturing it. An elastic structure behind the vaginal introitus was palpable. It was painless to touch and extended from anterior to posterior wall of vagina. A red rubber catheter could be passed around the septum (Figure 1). A diagnosis of longitudinal vaginal septum was made.

The vagina was divided by this septum asymmetrically. The left side of vaginal cavity was larger than the right side and was covering more of the area of the cervical OS. So, while delivering the baby episiotomy was given on the left mediolateral side and the septum was pushed to the right permitting the birth of a male child 3000 grams with APGAR score of eight in one minute and nine in five minutes (Figure 2). Prophylactic treatment with an intramuscular injection of 10 IU of oxytocin was given to prevent postpartum hemorrhage. After delivery of the placenta the septum was inspected and there was tear in the septum through the middle aspect anterio- posteriorly dividing it into upper and lower segment (Figure 3).

The base of the septum was clamped and resected, then sutured to maintain hemostasis. The episiotomy site was also sutured and then the normal anatomy of the genital tract was restored (Figure 4). The postpartum period was uncomplicated and the patient was checked after the postpartum period by pelvic ultrasound which did not find any uterine/ renal anomalies.

Figure 1: Red rubber catheter passed around the longitudinal vaginal septum.

Figure 2: Longitudinal septum pushed to right side during delivery.

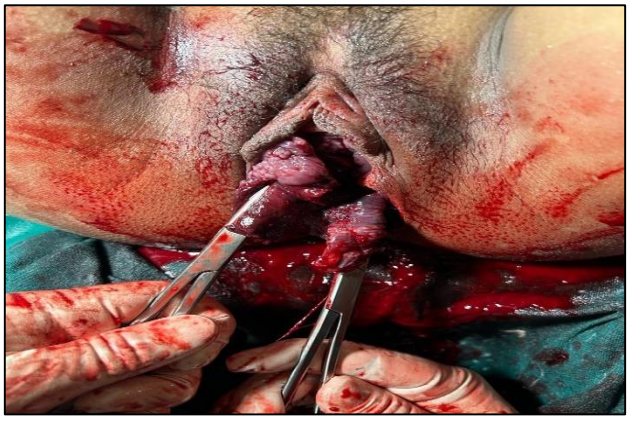

Figure 3: Lacerated longitudinal vaginal septum after delivery.

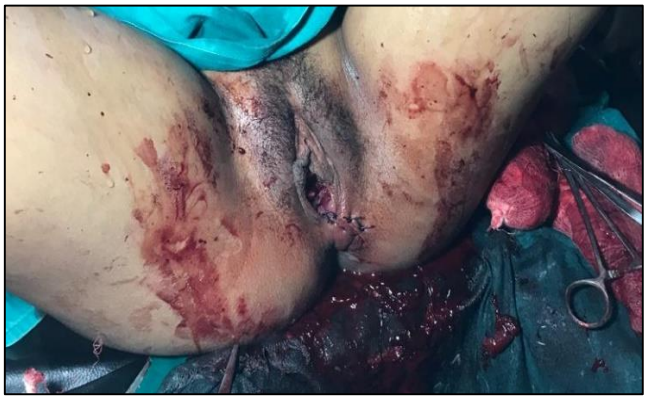

Figure 4: Normal anatomy restored after resection and suturing.

DISCUSSION

Although a rare condition, longitudinal vaginal septum should always be taken into consideration in the differential diagnosis when a varying combination of dyspareunia, cyclic pain, hematocolpos, hematometra and mucocolpos is present, either associated or not with primary amenorrhea, which may present when there is complete obstruction of vaginal canal. Diagnosis and treatment should be timely to avoid possible complications such as pelvic adhesions and damage to the fallopian tubes, principally in case of complete obstruction, as well as the discomfort and psychological repercussions of painful symptoms such as dyspareunia.[3,5]

The diagnosis of vaginal septum is difficult when there are no symptoms or when it is not associated with uterine abnormalities, which may lead to pregnancy or pregnancies loss. In our case, the longitudinal septum was diagnosed during the vaginal examination during second stage of labor.

In this case there were no symptoms prior to diagnosis, with the septum only being identified during labor, an even more unusual situation. The relative delay in identifying

this anatomical abnormality may be justified by the fact that in this case the vaginal septum was partial and due to lack of knowledge of patient regarding the normal vaginal anatomy. Insufficient patient awareness and the absence of noticeable symptoms could have contributed to the case remaining undiagnosed until now.

The discovery of such abnormality requires an investigation of the uterine cavity to rule out associated anomalies like uterus didelphys and septate uterus. Ultrasonography (USG), magnetic resonance imaging (MRI) and hysterosalpingography (HSG) are the principal tools for diagnosing longitudinal vaginal septum. These tests are recommended because they can enable the thickness and site of the septum to be established in addition to alerting to the coexistence of other associated congenital defects.[3,5]

The thing to be emphasized in this case is that the diagnosis was made solely based on physical examination, without the use of any of the above mention investigation. During delivery, the management requires two steps, the first step is the ligature and section of the septum when the presentation is about to be in contact with it and start pushing the tissue and the second is the resection of the septum after the delivery. However, care should be taken not to provoke any accidental trauma to the bladder or rectal mucosa. The normal vaginal mucosa after the resection is sutured along the length of the defect. The post-delivery care will be based on local antibiotic therapy and examination 2 or 3 weeks after delivery in order to assess the anatomical structure of the vagina.[6,7]

The main differentiating feature of this case is that the case was managed in rural health care setting of eastern Nepal without the provision of an obstetrician. The case was managed by general practitioner and medical officers working in this hospital and it was a very new and unique case for us.

CONCLUSION

Isolated longitudinal vaginal septum is a rare condition and vaginal delivery is possible after ligation and resection of the septum. The presence of longitudinal vaginal septum is not the formal indication for cesarean section.

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REFERENCES

1. Acien P. Incidence of Müllerian defects in fertile and infertile women. Human Reproduction. 1997;12(7):1372-6.
2. Pavone ME, King JA, Vlahos N. Septate uterus with cervical duplication and a longitudinal vaginal septum: a müllerian anomaly without a classification. Fertil Steril. 2006;85(2):494-e9.
3. Brown SJ, Badawy SZA. A rare mullerian duct anomaly not included in the classification system by the american society for reproductive medicine. Case Rep Obstet Gynecol. 2013;2013:569480.
4. Dunn R, Hantes J. Double cervix and vagina with a normal uterus and blind cervical pouch: a rare müllerian anomaly. Fertil Steril. 2004;82(2):458-9.
5. Buttram VC, Gomel V, Siegler A, DeCherney A, Gibbons W, March C. The American fertility society classifications of adnexal adhesions, distal tubal occlusion, tubal occlusion secondary to tubal ligation, tubal pregnancies, Mullerian anomalies and intrauterine adhesions. Fertil Steril. 1988:49(6):944-55.
6. Barick A, Jayi S, Alaoui FZ, Elhaoudani J, Chaara H, Melhouf MA. Vaginal delivery in case of isolated longitudinal vaginal septum: an uncommon situation: a case report. PAMJ Clin Med. 2021;5(25).
7. Kumar N, Tayade S. An undiagnosed case of longitudinal vaginal septum in a term woman with obstructed labour: a case report. Int J Reproduct Contracept Obstetr Gynecol. 2014;3(3):754-7.

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