INTERNATIONAL JOURNAL OF PRECLINICAL AND CLINICAL RESEARCH

CASE REPORT

Term Pregnancy with Septate Uterus and Longitudinal Vaginal Septum – A Case Report

B Sarvamangala[1], P L Shobha Rani[2]*

1 Department of OBG, JJM Medical College, Davangere, Karnataka, India
2 Department of OBG, Sapthagiri Institute of Medical Sciences, Bangalore, Karnataka, India

OPEN ACCESS

Received: 13.10.2021
Accepted: 11.11.2021
Published: 02.12.2021

Citation: Sarvamangala B, Rani PLS. (2021). Term Pregnancy with Septate Uterus and Longitudinal Vaginal Septum – A Case Report. International Journal of Preclinical & Clinical Research. 2(3): 73-76. https://doi.org/10.51131/IJPCCR/v2i3.24

* **Corresponding author**.

shobha164@gmail.com

Funding: None

Competing Interests: None

Copyright: © 2021 Sarvamangala & Rani. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Published By Basaveshwara Medical College & Hospital, Chitradurga, Karnataka

ISSN
Print: XXXX-XXXX
Electronic: 2583-0104

Abstract

Herein a case of 22-year-old primigravida women has been reported who was diagnosed with septate uterus along with longitudinal vaginal septum. Her antenatal period was uneventful, routine ultrasound scan during antenatal period detected no abnormalities. On per abdomen examination uterus was term size, heart rate of fetus was 144 beats per minute. Examination of vagina showed longitudinal vaginal septum of 0.5 cm thick, and cervical dilatation of 4 cm. Intraoperative findings recorded were; (i) Gravid uterus harbouring singleton intrauterine gestation in longitudinal lie & cephalic presentation. (ii) Dimple at the uterine fundus, uterine septum that extends to cervix from fundus, enlarged left horn containing the present pregnancy & the other is smaller. Women underwent emergency ceasarean section mode of delivery on account of longitudinal vaginal septum. The case described here is the unique case report wherein 22-year-old primigravida women detected with a complaint of septate uterus along with longitudinal vaginal septum was successfully delivered live male baby weighing 2.70 Kg following emergency ceasarean section.

Keywords: Septate uterus; Longitudinal vaginal septum; Caesarean section

Introduction

During embryogenesis, the complex genital tract development undergoes numerous events which involve differentiation of cell, migration, fusion, & canalization. A congenital abnormality can occur if this process fails at any stage. The urogenital sinus forms the distal third of the vagina, while the proximal two-thirds are developed by merging of the Mullerian ducts. The sinovaginal bulbs, 2 solid evaginations that originate at the Mullerian tubercle's distal extremity in the urogenital sinus, proliferate in the uterovaginal canal's caudal end to form a solid vaginal plate. Apoptosis of the central cells in this vaginal plate results in the formation of the lower vaginal lumen, which extends in a cephalic direction. Canalization is complete by twenty intrauterine life weeks.[(1)] The Mullerian ducts, on the other hand, fuse together between 11th & 13th

intrauterine life weeks, and this fusion & subsequent absorption occur in caudal-cranial direction.[2,3]

The commonest congenital anomalies of the reproductive system are congenital uterine anomalies produced by defects in Mullerian fusion, with septate uterus being the commonest Mullerian abnormality, which occurs in 2 to 3 percent of women.[4] A uterus didelphys or septate uterus are uterine defects that are linked commonly to longitudinal vaginal septum.[5] Overall, the incidence of uterine defects affect 4.3 percent of the general population as well as infertile women, & 5 to 25 percent of women who experience recurrent loss of pregnancy.[6] We herein presented a case report of a 22-year-old primigravida women presented with the complaints of septate uterus with longitudinal vaginal septum, and delivered live male baby following emergency ceasarean section mode of delivery.

Case Report

A 22-year-old primigravida women who conceived spontaneously came to our facility with complaints of labour pain three hours prior to admission and leaking Per vagina since two hours. Her antenatal period was uneventful, routine ultrasound scan during antenatal period detected no abnormalities. On per abdomen examination uterus was term size, heart rate of fetus was 144 beats per minute. The examination of vagina showed longitudinal vaginal septum of 0.5 cm thick (Figure 2), and cervical dilatation of 4 cm.

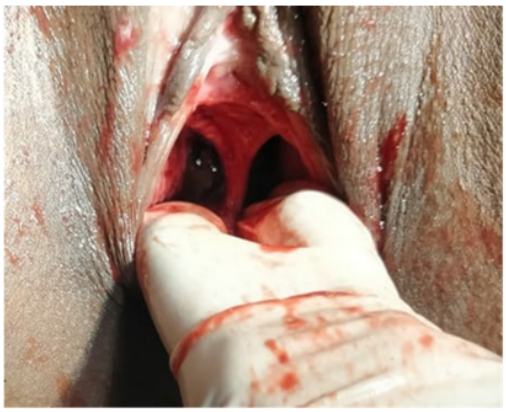

Fig 1. Longitudinal vaginal septum with watery vaginal discharge

The following intraoperative findings were recorded; (i) Gravid uterus harbouring singleton intrauterine gestation in longitudinal lie and cephalic presentation. (ii) Dimple at the uterine fundus (Figure 2), uterine septum extending from fundus to cervix (Figure 3), enlarged left horn containing the present pregnancy and the other is smaller (Figure 4).

Women underwent emergency ceasarean section mode of delivery on account of longitudinal vaginal septum and delivered a live male baby weighing 2.70 Kg. Mother and

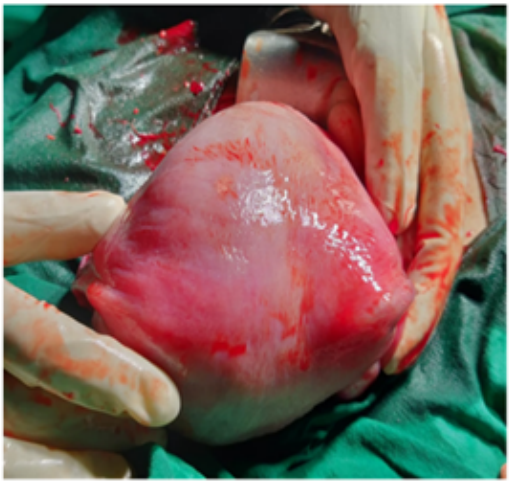

Fig 2. Dimple at the uterine fundus

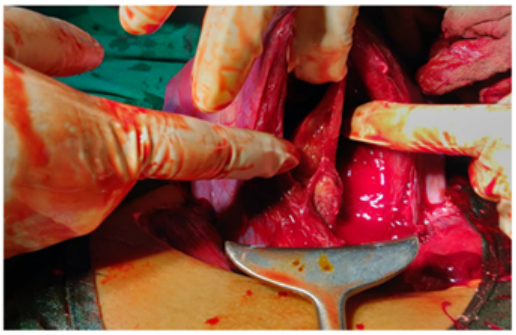

Fig 3. Uterine septum extending from fundus to cervix

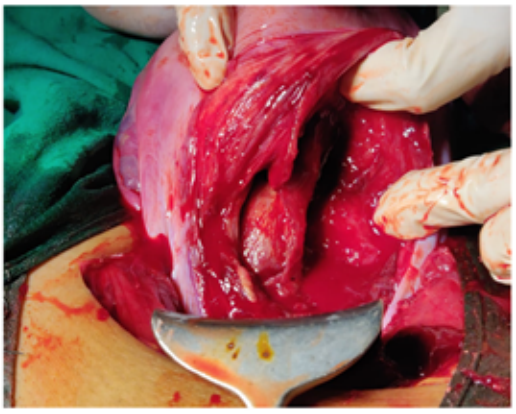

Fig 4. Enlarged left horn containing the present pregnancy and the other horn is smaller

baby was discharged on post-op day 5. General condition of mother was fair and afebrile, vitals stable, CVS and RS-NAD, per abdomen-uterus well contracted, soft, non-tender, bowel sounds present, subcutaneous sutures ends cut on post-op day 5, wound healthy, no discharge, VVE-lochia healthy, Bilateral breast soft, non-tender, secretion. Baby alive and healthy, baby mother side, patient passed stools and urine on post-op day three

Discussion

The septate uterus with a longitudinal vaginal septum still hasn't been assessed as a homogeneous group. The majority of studies have focused on reproductive outcomes, but it's unclear whether this uterovaginal abnormality is linked to gynecologic issues like infertility, endometriosis & malignant potential or not.[7,8] With this scenario, we aimed to present a rare case report of a 22-year old primigravida women diagnosed with septate uterus along with longitudinal vaginal septum.

A uterine septum is a congenital abnormality in which a longitudinal septum divides the uterine cavity. The uterus's serosa surface mainly has a normal typical shape. In this case, although, a groove-like induration was observed. The wedge-shaped partition may only affect the cavity's superior part, leading to a sub septate uterus or an incomplete septum, or less frequently might affect the total cavity length, including the cervix, resulting in a double cervix. In this subject, a sub septate variation was discovered. The septations may extend caudally into the vagina, forming a double vagina. Similar findings were reported by Heinonen.[9]

de Franca Neto et al opinioned that women diagnosed with longitudinal vaginal septum like congenital uterine anomalies could be treated by complete septum removal. Excision is the traditional method, which is done with extreme caution to avoid development of rectal or bladder lesions. The tissue must be excised completely as the leftover septum fragments might induce dyspareunia. The resection of septal tissue could be done, & the normal vaginal mucosa on each vaginal wall needs to be sutured together along the length of the defect done by the resection. In asymptomatic women with a longitudinal vaginal septum, surgery is not required; though, performing the procedure will surely make a subsequent vaginal delivery easy.[1]

In the present case study of a 22-year-old primigravida women detected with complaints of septate uterus along with longitudinal vaginal septum was successfully delivered live male baby weighing 2.70 Kg following emergency ceasarean section. According to Maneschi & associates, eleven women had a complete septate uterus & vaginal septum. At the twelve - month mark, they had a cumulative eighty percent pregnancy rate. The researchers revealed the fact that gestational ability is only impaired moderately during congenital uterine anomalies.[8] The location of surgery is controversial. Some authors's believe that if a septum is discovered in an asymptomatic subject undertaking routine assessment for non-infertility or infertility related causes, it shouldn't be removed. On the other hand, some authors argue that exposing infertility subjects with septum to high miscarriage risk when she becomes pregnant is not reasonable.[10,11] Though, when a septate uterus is diagnosed in a woman with recurrent loss of pregnancy, there is strong consensus that surgery must be performed. Hysteroscopic septoplasty is very well preferred method as it has low morbidity rate as well as has improved pregnancy outcomes.[12]

Selection bias could be the cause for these controversial outcomes. In several research study, cases were gathered from clinics focusing on operative treatment of these anomalies or infertility clinics. This implies that the worst cases were chosen for these investigations, which might cause the results to be distorted. A second source of bias is that previous research cannot be compared since the group septate uterus contains cases with both sub septate & septate uterus, & vaginal abnormality was not been documented.

Moreover, results of Rock et al don't support the hypothesis that the more complete the septum, the higher the frequency of complications since authors finds in their retrospective study that a complete uterine septum with a longitudinal vaginal septum is often flexible and thin, & the uterine septum gets stretched during pregnancy. However, authors fail to discover why do some women suffer recurrent miscarriages while some have a satisfactory reproductive outcome[13] According to Fedele et al poor vascularity & placentation to the septum have been proposed as potential causes.[14]

Conclusion

In conclusion, rare congenital uterine anomalies viz. septate uterus and longitudinal vaginal septum could be assumed in pregnant women having positive malpresentation, preterm delivery & recurrent miscarriage history. To the best of our knowledge, the case defined here is the unique case report wherein 22-year-old primigravida women detected with a complaints of septate uterus along with longitudinal vaginal septum was successfully delivered live male baby weighing 2.70 Kg following emergency ceasarean section.

References

1) Neto AHDF, Nóbrega BV, Filho JC, do Ó TC, Amorim MMD. Intrapartum diagnosis and treatment of longitudinal vaginal septum. *Case reports in obstetrics and gynecology*. 2014.
2) Pavone ME, King JA, Vlahos N. Septate uterus with cervical duplication and a longitudinal vaginal septum: a müllerian anomaly without a classification. *Fertility and Sterility*. 2006;85(2):494.e9–494.e10. Available from: https://dx.doi.org/10.1016/j.fertnstert.2005.07.1324.
3) Brown SJ, Badawy SZA. A Rare Mullerian Duct Anomaly Not Included in the Classification System by the American Society for Reproductive Medicine. *Case Reports in Obstetrics and Gynecology*. 2013;2013:1–3. Available from: https://dx.doi.org/10.1155/2013/569480.
4) Pang LH, Li MJ, Li M, Xu H, Wei ZL. Not every subseptate uterus requires surgical correction to reduce poor reproductive outcome. *International Journal of Gynecology & Obstetrics*. 2011;115(3):260–263. Available from: https://dx.doi.org/10.1016/j.ijgo.2011.07.030.
5) Dunn R, Hantes J. Double cervix and vagina with a normal uterus and blind cervical pouch: A rare müllerian anomaly. *Fertility and Sterility*. 2004;82(2):458–459. Available from: https://dx.doi.org/10.1016/j.fertnstert.2004.03.027.
6) Shahrokh ETN, Naderi T, Irani S, Nekoo A. Frequency distribution of pregnancy occurrence in infertile women after diagnostic-surgical hysteroscopy. *International Journal of Reproductive BioMedicine*. 2007;5(4):99–102.
7) Acien P. Reproductive performance of women with uterine malformations. *Human Reproduction*. 1993;8(1):122–128.
8) Maneschi F, Parlato M, Incandela S, Maneschi M. Reproductive performance in women with complete septate uteri. *The Journal of reproductive medicine*. 1991;36:741–745.
9) Heinonen PK. Complete septate uterus with longitudinal vaginal septum. *Fertility and Sterility*. 2006;85(3):700–705.
10) Ozgur K, Isikoglu M, Donmez L, Oehninger S. Is hysteroscopic correction of an incomplete uterine septum justified prior to IVF? *Reproductive BioMedicine Online*. 2007;14(3):335–340. Available from: https://dx.doi.org/10.1016/s1472-6483(10)60876-0.
11) Homer HA, Li TC, Cooke ID. The septate uterus: a review of management and reproductive outcome. *Fertility and Sterility*. 2000;73(1):1–14. Available from: https://dx.doi.org/10.1016/s0015-0282(99)00480-x.
12) Propst AM, III JAH. Anatomic Factors Associated with Recurrent Pregnancy Loss. *Seminars in Reproductive Medicine*. 2000;18(04):341–350. Available from: https://dx.doi.org/10.1055/s-2000-13723.
13) Rock JA, Roberts CP, Hesla JS. Hysteroscopic metroplasty of the Class Va uterus with preservation of the cervical septum. *Fertility and Sterility*. 1999;72(5):942–945. Available from: https://dx.doi.org/10.1016/s0015-0282(99)00380-5.
14) Fedele L, Dorta M, Brioschi D, Giudici MN, Candiani GB. Pregnancies in septate uteri: outcome in relation to site of uterine implantation as determined by sonography. *American Journal of Roentgenology*. 1989;152(4):781–784. Available from: https://dx.doi.org/10.2214/ajr.152.4.781.