

Ruptured Rudimentary Horn in Pregnancy at 20 Weeks with Previous Caesarian Section: A Case Report

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Abstract

Pregnancy in a non communicating rudimentary horn is extremely rare and usually terminates in rupture during first or second trimester of pregnancy . Diagnosis of rudimentary horn and its rupture in a woman with previous caesarean section is difficult . It can be missed on routine ultrasound scan and is usually diagnosed after rupture. We report a case of rupture of rudimentary horn in a patient with previous caesarean section at 20 wks of gestation. Timely laprotomy revealed rupture of left rudimentary horn with massive haemoperitoneum. Excision of horn and blood transfusion saved the patient in a young female with pregnancy is reported for its unusual presentation.

Key Words

Haemoperitoneum, Rupture Rudimentary Horn, Previous Caesarean Section

Introduction

The incidence of uterine congenital anomalies because of mullerian defects in normal fertile population is 3.2 % (1). The incidence is estimated at 1 per 100,000 to 1 per 140,000 pregnancies (2) .

Rudimentary horn is one of the largest congenital uterine anomalies and consists of a relatively normal appearing uterus on one side and a rudimentary horn on the other side (1). Most of the rudimentary horn are non-communicating with the uterine cavity (72 % to 85 %) (3). Condition is diagnosed only on surgery and is hazardous to maternal life as rupture of pregnant horn results in massive haemoperitoneum.

Case Report

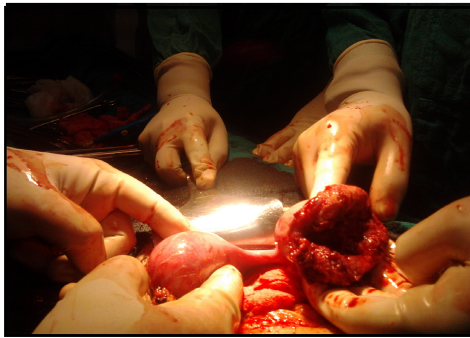
A 24 year G2 P1 with history of amenorrhoea five months and previous LSCS for acute fetal distress was referred to SMGS Hospital from SDH Kathua with acute abdominal pain. She had her earlier antenatal checkups

at SDH Kathua. She was having signs and symptoms of haemorrhagic shock. Her pulse was feeble . She was hypotensive and pale (pallor +++). Her haemoglobin was 3.0 Gm% . On Examination her abdomen was tense and tender. Size of the uterus could not be made out. On per vaginal examination, fornicial fullness and tenderness was elicited. Ultrasonography was done, which revealed haemoperitoneum. Patient was resuscitated and taken for laprotomy. At laprotomy , there was a normal uterus on right side with a scar and rupture of rudimentary horn on left side and a foetus weighing about 500gms. was lying in the abdomen posteriorly in pouch of Douglas. The rudimentary horn of uterus was excised and after attaining complete haemostasis , abdomen was closed in layers. The lady received 6 points of blood. Her post operative recovery was good.

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Fig 1. Showing Ruptured Rudimentary Horn



Discussion

Mullerian abnormalities were first classified in 1979 by Buttram & Gibbon (2) and further revised by American Society Of Reproductive Medicine in 1988. Pregnancy in a non communicating horn occurs through transperitoneal migration of spermatozoa or with transperitoneal migration of the fertilized ovum (4). The first case of uterine rupture associated with rudimentary horn was reported in 1969 by Mauricecaeu (5). Kadan and Romano described rudimentary horn rupture as the most significant threat to pregnancy and a life threatening situation (6). The timing of rupture varies from 5 to 35 weeks depending on the musculature of the horn and its ability to hypertrophy and dilate. Rupture occurs before 20 weeks in 90% of the cases & can be catastrophic (7). Rupture of horn is still a common cause of maternal death due to severe intra abdominal haemorrhage, as the uterine wall is more vascular (8). Early diagnosis of the condition is essential and challenging. Ultrasonography, Laparoscopy and MRI are the diagnostic tools (9). Fedele et al have found USG to be diagnostic but its sensitivity is only 26%, which further decreases as the pregnancy advances (10). There are no definite clinical criteria to detect this life threatening condition in emergency. Diagnosis can be difficult because the enlarging horn with a thinned myometrium can obscure surrounding anatomic structures. Despite advances in USG & other diagnostic modalities, the diagnosis of ruptured horn is confirmed by laprotomy. The diagnosis can be missed on USG even in expert hands. Primary strategy of

management of rudimentary horn is timely resuscitation, blood transfusion and surgery. Proper diagnostic methods and early referral from peripheral centers is needed to reduce the morbidity and mortality in such patients. There are however instances of early diagnosis and laproscopic excision of rudimentary horns. Dicker et al removed a small horn through suprapubic port (11). Yoo et al (12) resected a pregnant horn 5*5 cms laparoscopically. Even in cases of unruptured horn immediate surgery is desired. Removal of horn prior to pregnancy in order to prevent complication is advised.

References

1. Simon L, Martinez F, Pardo M, Tortajad A. Mullerian defect in women with normal reproductive outcome. *Fertility and Sterility* 1991; 56: 1192-93
2. Buttram VC, Gibbon WC. Mullerian anomalies "A proposed classification, an analysis of 144 cases". *Fertility and Sterility* 1979; 32:40-64
3. Nahum G Rudimentary horn pregnancy, case report on surviving twins. *J Reproductive Medicine* 1997; 42: 525-32
4. Heinonen PK. Unicornate uterus and rudimentary horn. 1997; 68: 224-30.
5. Mauricecaeu F. Traite des malades des femmes grosses. *Hanumanalu in Obst and Gynae* 2012; 985076: 4
6. Kadan Y, Romeno S. Pregnancy in Rudimentary horn diagnosed by usg and treated by laparoscopy, a case report. *J Minimally Invasive Gynaecol* 2008;15(5):527-30.
7. Kangal D V, Hanumenalu L.C. Ruptured rudimentary horn at 25 weeks with previous vaginal delivery, Case report. *Obst & Gynae* 2012;12:23-24
8. Chowdhary S, Chowdhary T, Azim E. Pregnancy in a non communicating horn of uterus, A case report. *Banglesh Med J* 2010;39: 47 - 48
9. Nahum G. Rudimentary horn pregnancy {20th century world wide experience of 588 cases. *J Reproductive Medicine* 2002;47(2):151-63.
10. Fedle R, Dorta M, Varicellani P. USG in the diagnosis of subclasses of unicornuate uterus. *Obst and Gynae* 2005;105 (6):1456-57
11. Dicker D, Nitke S, Shoenfeld A, Fish B, et al. laproscopic management of rudimentary horn pregnancy" *Human Reproduction* 1998;13(9):2643-44
12. Yoo EH, Chun SH, Woo BH. Laproscopic resection of a rudimentary horn pregnancy. *Acta Obstetriciabnet Gynecologica Scandinavica* 1999;78(2):167-68