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Case Report

A rare case of broad ligament pregnancy diagnosed at 36 weeks of gestation incidentally during laparotomy

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ABSTRACT

Pregnancy in the broad ligament is a rare form of ectopic abdominal pregnancy with a high risk of maternal mortality. Ultrasound examination may help in the early diagnosis but mostly the diagnosis is established during surgery. We are reporting a case of broad ligament pregnancy diagnosed incidentally during laparotomy. She had uneventful postoperative recovery.

Keywords: Broad ligament, Laparotomy

INTRODUCTION

Abdominal pregnancies account for 1% of ectopic pregnancies and the maternal mortality rate has been reported to be as high as 20%.^{1,2} It may occur in any part of the abdomen but is common in pouch of Douglas and is rare in broad ligament. It presents as an acute abdominal emergency during pregnancy and the diagnosis is commonly achieved during surgical exploration. Though ultrasonography may at times suggest this possibility if there is high index of suspicion.

CASE REPORT

A gravida-2 para-1 at 36 weeks came to our labor room after being referred from a rural hospital with complains of bleeding per vaginum and pain abdomen for last 3 days. She had an ultrasonography report showing single dead fetus of 35 weeks with vertex presentation with fundal placenta. Estimated fetal weight was 2.5 kg. On examining the patient she was looking pale. Per abdominal examination revealed uterus term size, relaxed with cephalic presentation. On auscultation fetal heart

sound was not localized. On per speculum examination cervix was deviated to right side. On bimanual examination cervix was deviated to right side and os was closed. Head was felt posterior to the os towards the left side. Induction of labor was started with tablet misoprostol (50 micrograms repeated 4hourly for four doses). As there was no progress after repeated doses of misoprostol and Foley's catheter couldn't be negotiated through cervix, she was planned for termination by caesarean section.

After opening the peritoneal cavity we found uterus of size 18-20wks and it was deviated to right side. After opening the uterus no product of conception was found inside the cavity (Figure 1). On examining the left side broad ligament fetal parts were palpable. Therefore suspecting a broad ligament pregnancy, the broad ligament cavity was opened by cutting on anterior layer of broad ligament. A macerated female baby (Figure 2) was delivered followed by placenta and membranes. The placenta was implanted over the broad ligament (Figure 3, 4). Uterus was explored and it was found to be intact without any rupture (Figure 5). Feeding vessels were seen

on the back from omentum and rectum (Figure 6). Right side tube and ovary was healthy but left side adnexal anatomy was grossly distorted. Uterus was closed followed by closure of the anterior layer of broad ligament. A corrugated rubber drain was given in the broad ligament cavity as there was oozing from the placental bed. Abdomen was closed.

The patient recovered uneventfully and drain was removed after 48 hours and was discharged on 8th post-operative day.

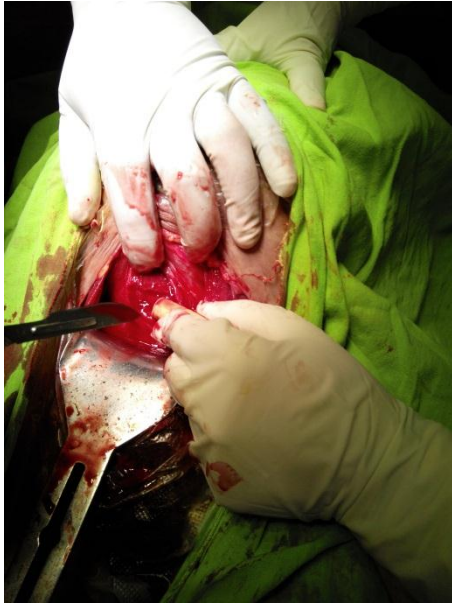


Figure 1: Showing the cavity is empty after opening the anterior wall of uterus.



Figure 2: The macerated fetus.

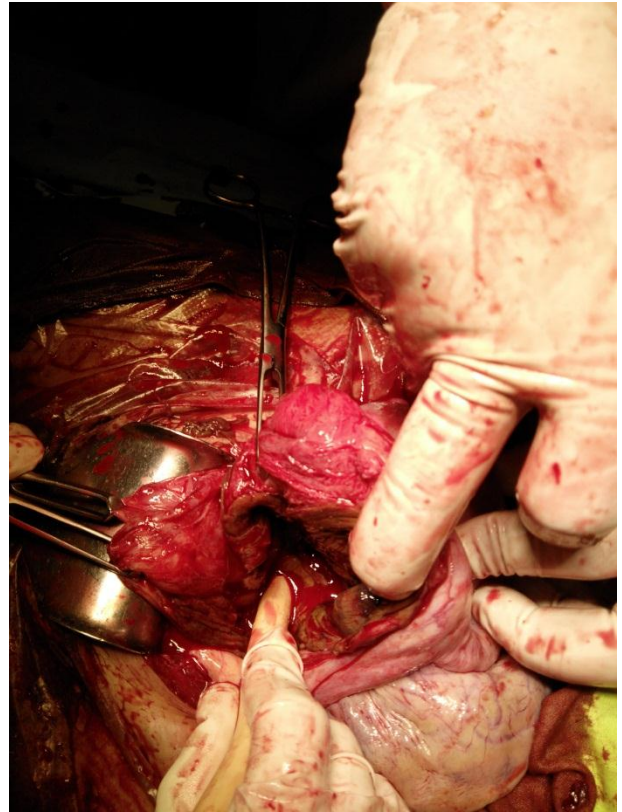


Figure 3: Showing the site of implantation of placenta over the newly formed broad ligament cavity.

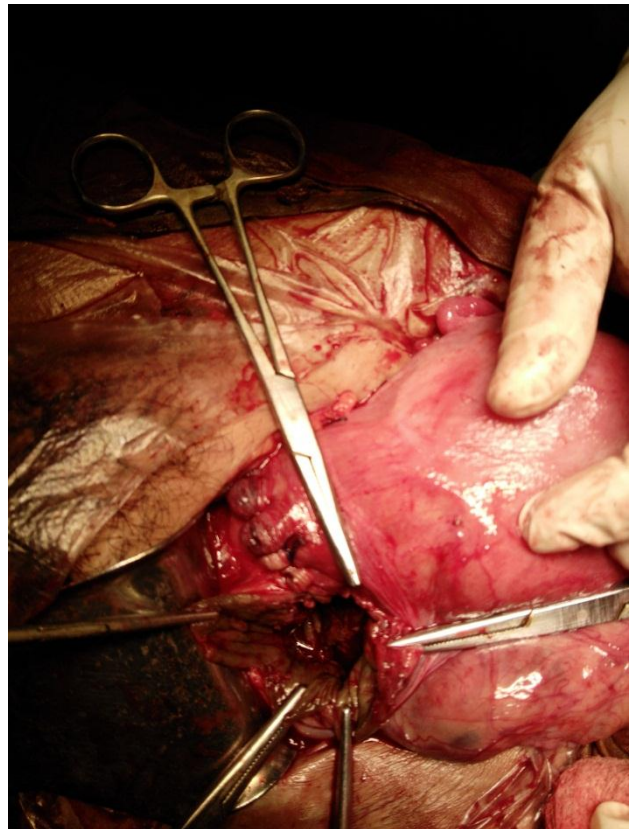


Figure 4: The implantation of placenta clearly over the broad ligament after closing the cut uterine wall.



Figure 5: When explored the uterine wall it was found to be intact.

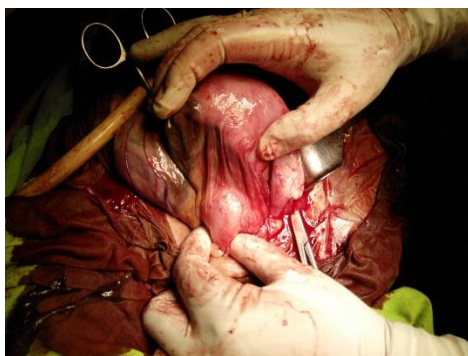


Figure 6: Showing the posterior surface of broad ligament cavity, rectum is clearly visible.

DISCUSSION

Broad ligament ectopic pregnancy is a rare but life threatening condition. The abdominal pregnancies account for 1% of ectopic pregnancies. Maternal mortality is as high as 20%. It is either due to primary implantation of the zygote on the broad ligament or followed by secondary implantation to fallopian tube, ovary or other peritoneal surface. The risk factors include a history of secondary infertility, pelvic inflammatory disease, use of intrauterine devices, use of progesterone only pills, a previous history of ectopic pregnancy and endometriosis.³ There are various clinical presentations reported in the literature but a dull lower abdominal pain during early gestation is common. This has been attributed to the placental separation, tearing of broad

ligament and small peritoneal haemorrhage.^{4,5} Vaginal bleeding is also a common feature reported in up-to half of the patients as reported by Hallatt and Grove.⁶ This bleeding is reported to be due to breakdown of decidual casts.^{3,4} It has been described in the literature that if there is no intrauterine pregnancy on ultrasonography and the ectopic sac is beside the lower part of uterus, a strong suspicion of broad ligament ectopic should be considered. MRI provides additional information and may help in surgical planning by evaluating the extent of uterine and mesenteric involvement.^{7,8} The management is exploratory laparotomy. However, stable patients with early gestation can be considered for laparoscopic removal for small broad ligament pregnancies.⁹ Conservative management or medical management is not recommended for broad ligament ectopic if the diagnosis is certain.

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