

PRIMARY BROAD LIGAMENT PREGNANCY: A CASE REPORT

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ABSTRACT

Primary broad ligament pregnancy is a rare form of extrauterine pregnancy with a high maternal and perinatal mortality. Early diagnosis is important to prevent life threatening hemorrhage but can be missed on antenatal ultrasonography. The diagnosis is usually established during laparotomy. We present a case of 22 year old female with ectopic gestation in broad ligament which was missed on ultrasonography and diagnosed during surgery.

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INTRODUCTION

Primary broad ligament pregnancy is a rare form of extrauterine pregnancy especially in case of spontaneous conception. Early diagnosis is important to prevent life threatening hemorrhage from placental detachment. The maternal mortality rate is around 20% and rate of perinatal mortality ranges from 40% to 95% (1-2). The diagnosis of abdominal pregnancy can be missed on ultrasonography in about 50% of cases (3) and is usually established on laparotomy.

CASE HISTORY

A 22 year old female, gravida 2, para 1 with no live issue was admitted in the obstetric emergency at 18 weeks gestation and an ultrasound report of intrauterine pregnancy with absent foetal heart sound. She had been married for three years and had conceived spontaneously. Two years ago she delivered a full term live female child by Caesarean section who died after ten days of unknown reasons. Her past history and family history were unremarkable. On physical examination, she had a pulse rate of 86 beats/minute, a respiratory rate of 18 breaths/minute, her blood pressure was 100/70 and was afebrile. Haemoglobin was 12.5 g/dl, serological testing for human immunodeficiency virus, hepatitis B and C virus were negative. An obstetric examination revealed a fundal height corresponding to 16-18 weeks. No bleeding or leakage was found on speculum examination. The external os was closed on vaginal examination. On auscultation no foetal heart sound was heard.

Medical induction for delivery was attempted but there was no sign of progress into labor. She was taken for emergency laparotomy. At laparotomy, uterus was slightly enlarged. A right broad ligament pregnancy was seen. Adhesions were seen between the gestational sac, ovary, fallopian tube and omentum. Surgical removal of ectopic gestation and right salpingo-oophorectomy was done. Grossly placenta was normal (Figure1). Histopathological examination of the tissue from the site of ectopic gestation revealed chorionic villi and trophoblast (Figure2). Sections from ovary showed corpus luteum. Section from fallopian tube showed normal histology. No chorionic villi seen in the ovary or fallopian tube. She was discharged on 10th postoperative day. At follow up she was doing well.



Fig. 1: Foetus with placenta

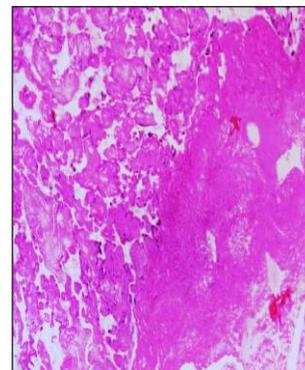


Fig.2 : H&E stained section showing chorionic villi and necrosis (X400)

DISCUSSION

An ectopic gestation in broad ligament also called as interligamentous pregnancy is a rare form of extrauterine pregnancy where the gestational sac or foetus develops within the broad ligament. Fallopian tube is the commonest site for ectopic gestation, accounting for 95.5% of cases (4). The non tubal sites include ovary and abdomen. Among the abdominal sites pouch of douglas is common while broad ligament is rare (5).

Friedrich and Rankin's modification of Studdiford's criteria (6) used to diagnose primary abdominal pregnancy are as follows: 1) the presence of pregnancy of no more than 12 weeks' histological gestation with trophoblastic elements related solely to a peritoneal surface; (2) grossly normal bilateral fallopian tubes and ovaries; (3) no evidence of uteroplacental fistula. In our case gestational age was 18 weeks so this criterion cannot be applied.

History of secondary infertility, use of intrauterine devices, progesterone only pills, pelvic inflammatory disease and endometriosis increases the risk of ectopic gestation (7). In our case patient had no such history. Though the clinical presentation may vary in different cases, abdominal pain is the most common finding.^[2] Other features include hemorrhage, shock and DIC accounting for high maternal mortality. Our patient did not have any symptoms during her pregnancy. Severe oligohydramnios causes compression of foetus leading to deformaties like limb defects, torticollis, facial asymmetry and joint abnormalities (8).

CONCLUSION:

Ultrasonography is helpful in diagnosis but findings can be missed as it is an observer dependent procedure and incomplete penetration due to oligohydramnios as in our case. A better view of uterine cavity and adnexa can be provided by transvaginal ultrasound. An accurate method for evaluating ectopic gestation is non-contrast MRI using T₂-weighted imaging (9). Treatment involves exploratory laprotomy with excision of gestational sac especially in advanced cases. However in the early stable cases laproscopic removal is successful (10).

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