CASE REPORT

Full-Term Viable Broad Ligament Pregnancy Surgically Managed with Favorable Feto-Maternal Outcome

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Mrs S, 30 years old, G₄ P₃₊₀ at 38 weeks of gestation, was admitted to the emergency ward on September 16, 2007, with complaints of mild pain in the abdomen off and on for the past 3 days. She had no other complaints. She was totally unsupervised with a grossly uneventful antenatal period except that she had a significant history of undergoing bilateral tubal lapro-ligation in the periovulatory phase in a lapro-ligation Camp. On clinical examination, her vitals were stable and the fundal height was corresponding to “32 weeks of gestation” baby was in transverse lie and there was oligohydramios. FHS was 136 beats/min regular. She was not in labour. Non-stress test was reactive. Ultrasonography revealed a single live pregnancy corresponding to 36 weeks of gestation, Type-III placenta previa with grade-3 maturity, and AFI was 8 cms with no obvious congenital anomalies. Her Hb % was 8 g% and other biochemical parameters were within the normal range.

She was taken up for elective cesarean section on September 18, 2007, with one unit of blood. On opening the abdomen, the uterus was of 10 weeks’ size separate from the pregnancy and had deviated to the extreme left. However, round ligaments could not be seen at that moment. An incision was made in the relatively avascular area and a

female baby was extracted with the APGAR of 6, 7, 8, and a birth weight of 2,800 g. The abdominal cavity was reexamined; it was found that the placenta was attached to the outer right lateral wall of the uterus. The conceptus was well encased between the two leaves of the right broad ligament, and the tube and round ligament were stretched over this pseudogestational sac containing the fetus and placenta. There were absolutely no adhesions anywhere in the abdominal cavity. Total abdominal hysterectomy with right salpingectomy was done and the specimen sent for histopathologic examination (Fig. 1). Her post-operative period was grossly uneventful. She received one unit of blood transfusion post-operatively. The baby was placed at her bedside and breast fed since the delivery. Both the mother and baby were discharged on the eighth post-operative day in good general condition. She came for a follow-up at 6 weeks post-partum. She was well and healthy along with her baby.

Discussion

Abdominal pregnancy accounts for approximately 0.01 % out of 1–2 % of all ectopic pregnancies. Broad ligament pregnancy reaching full-term gestation and delivering a viable healthy baby is an extremely rare phenomenon. However, due to poor and neglected antenatal care, advancement in assisted reproductive techniques, endometriosis, tuberculosis, the use of intra-uterine devices, and induced abortions, it is showing an increasing trend [1].

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Fig. 1 Specimen showing abdominal hysterectomy with right salpingectomy

To diagnose abdominal pregnancy antenatally is often very difficult. However, these women often feel uncomfortable with the pregnancy and have signs and symptoms like abdominal pain, painful fetal movement, gastrointestinal complaints, vaginal bleeding, abnormal presentation uterus usually not standing out during abdominal massage, spurious labor, and usually failed induction of labor. In early gestation, conceptus presents as a pelvis mass separate from the uterus. The diagnosis can be aided and confirmed by ultrasound, X-ray, or MRI. Although, it is more common in the elderly multi-gravid patients, in developing countries, it can be challenging to establish the diagnosis in advanced gestation, as in our case the ultrasound findings were misleading.

Abdominal pregnancy is almost always secondary in nature. Sometimes, tubal pregnancy may rupture spontaneously or become disrupted due to tubal insult or abortion from the fimbrial end and the conceptus then gets attached to the abdominal viscera, peritoneum, outer surface of the uterus, or the uterovesical fold in the scarred uterus. It derives its nutrition from there itself. In our case, tubal insult during lapro-ligation may be postulated as a cause of broad ligament pregnancy.

Once diagnosed, the definitive management is emergency laparotomy and termination of pregnancy. But, the

definitive treatment should be done by an expert team at a fully equipped tertiary hospital. These cases need to be individualized and the time of surgical intervention may be modified for a favorable fetomaternal outcome, thus reducing maternal morbidity and mortality as well as perinatal mortality [2].

In recent times, the reported fetal survival has been 63 % after 30 weeks of gestation with 20 % fetal anomalies or deformities, the most common being facial and cranial asymmetry, joint deformities, and CNS anomalies. With preplanned operative strategy, the maternal mortality has been reduced from 20 % to less than 5 % in the past 20 years at a tertiary hospital. Morbidity in surviving women is excessive in many cases due to its related complications like peritonitis, septicemia, abscess formation, adhesions, intestinal obstruction, and abdominal organ injury. Leaving the placenta in situ increases the maternal morbidity. But, sometimes, it has to be left in situ if it is adherent to the intestine or great vessels and is inseparable for fear of excessive hemorrhage [3].

Recent advances say that with viable fetuses, expectant management is a feasible option at a well-equipped tertiary care hospital. To tackle the uncontrolled hemorrhage intra-operatively, it has been encouraging to use military anti-shock trousers as a good option by some clinicians along with abdominal packing [4].

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