or infarction may require resection anastomosis, thus greatly reducing bowel length. These babies with short gut syndrome require total parenteral nutrition for a long time and die at the age of 5-7 years due to liver disease. Unfortunately, in our case also, in spite of doing adhesiolysis once, the baby again developed severe bowel adhesions and intestinal obstruction requiring bowel resection. Ultimately the baby died during postoperative period.

References

Paper received on 15/03/2005; accepted on 31/08/2005

Correspondence:
Dr. Shailesh Kore
Sangh Mitra CHS, Ambekar Nagar, Chunabhatti, Sion, Mumbai - 400 022.
Email: shaileshkore@hotmail.com
Tel. 56219388 Mobile: 9324332317

Advanced intraligamentary pregnancy resulting in a live birth
Sheela CN, Arun Mhaskar, Shashikala Karanth
Department of Obstetrics and Gynaecology, St. John’s Medical College and Hospital, Bangalore - 560 034.

Key words: advanced intraligamentary pregnancy

Introduction
Broad ligament pregnancy is a rare type of extraterine gestation where the fetus grows and develops between the two layers of broad ligament. Implantation is secondary to the escape of the early embryo from the tubal pregnancy following intraligamentary rupture. It is associated with high incidence of fetal anomalies and risk of severe maternal hemorrhage following placental separation. We report an advanced intraligamentary pregnancy with a good fetal and maternal outcome following a short period of conservative management.

Case report
A 45 year old multiparous woman, G5P4L3D1, presented to the gynecological outpatient with history of amenorrhea of about 3 months and pain in abdomen on an off, more so since 10 days. Her general condition was good, vitals were stable and blood pressure 130/100 mm Hg. Abdominal examination showed uterus enlarged to about 16 weeks size and pushed to the left side. A tense, cystic, nontender mass arising from the pelvis was felt by the side of the uterus extending up to the right hypochondrium. A diagnosis of ovarian cyst was made and the woman admitted for further evaluation.

Ultrasound scan showed an empty uterus displaced to the left and a single live fetus of 30-31 weeks gestation with head in the right flank, and no clear myometrium around the gestational sac. There were no obvious fetal anomalies, liquor was adequate with an amniotic fluid index of 11 cm and the estimated fetal weight was 1.5 kg. Impression was a single live fetus of 30-31 weeks with features suggestive of extra-uterine pregnancy (Figure 1 and 2).

Since her condition was stable and there were no fetal anomalies, conservative management for a period of about 2 weeks was planned to improve the perinatal outcome. Steroids were given to hasten lung maturity. The patient was monitored closely, an informed consent for laparotomy and possible hysterectomy was taken and 4 pints of cross-matched blood was kept ready.

Figure 1. Ultrasonography showing empty uterus and part of the gestational sac with the fetal head just below the liver.

Figure 2. Ultrasonography showing fetal parts and liquor in gestational sac.
Exploratory laparotomy was performed after 10 days of conservative management. At laparotomy, the uterus was found to be enlarged to about 16 weeks size and was pushed to the left. A gestational sac was seen on the right side separate from the uterus and extending up to the right hypochondrium. Right round ligament was thickened and was running in front of the sac (Figure 3). The medial ends of the right fallopian tube and the ovarian ligament were identified medial to and above the sac stretching across its posterior wall (Figure 3). Left tube and ovary were normal. Right-sided broad ligament pregnancy was thus diagnosed.

The sac was incised vertically and a live female baby was delivered with an Apgar of 6 and 10 at 1 and 5 minutes respectively. The baby weighed 1.45 kg and showed features of intrauterine growth restriction in addition to being preterm (32 weeks). Placenta was attached to the anterior wall of the sac and could be removed easily without much manipulation.

Brisk hemorrhage was encountered from the placental bed, which reduced to continuous ooze after tight packing. Internal iliac artery ligation was planned to achieve complete hemostasis and a surgeon was called who performed the same. Diffuse oozing from the cut edges was controlled by taking continuous locking sutures all along the cut edges. An intraperitoneal drain was left in situ. Estimated blood loss was about 1.5L and 3 pints of blood were transfused intraoperatively.

Postoperative period was uneventful. Patient was discharged on 7th postoperative day. The baby did well and was discharged after 2 weeks stay in neonatal intensive care unit. Mother and baby were doing well 2 weeks after discharge.

Discussion
Champion et al described in 1816 the first case of broad ligament pregnancy. Wolfe and Neigus 1 reported 3 early cases in 1953. Phupong et al2 reported an 11 weeks broad ligament pregnancy. Siow et al3 reported the first laparoscopically treated broad ligament pregnancy. In 1983 Parsons et al4 reported a case of advanced intraligamentary pregnancy of 33 weeks with fetal demise. In 1985 Vierhout and Wallenberg 5 reported a 36 weeks intraligamentary pregnancy resulting in a live and healthy infant. Cachon-Lopez et al6 have reported an abdominal pregnancy diagnosed at 30.4 weeks, managed conservatively for 2 weeks following which a live and healthy fetus was delivered from the broad ligament by laparotomy. Phupong et al7 report a case of broad ligament twin pregnancy while Deshpande et al8 report a twin broad ligament pregnancy following in-vitro fertilization and embryo transfer. If at the time of diagnosis the baby is expected to reach reasonable viability within a few weeks conservative management with close monitoring is justified. When diagnosed at early gestation a laparotomy should be carried out.

Reference