Full-Term Abdominal Pregnancy: Mother And Infant Survival

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Abdominal pregnancy, although very rare, should be in the differential diagnosis of any physician who practices obstetrics. When it does occur, it is a tremendous challenge because the diagnosis is hard to make, it is usually not suspected, and the risk to mother and infant is great.

This case of abdominal pregnancy was undetected until delivery, which fortunately resulted in a healthy full-term infant weighing 3655 g (8 lb 1 oz). The mother had received routine prenatal care, and three ultrasonograms failed to detect the condition. One year later no serious maternal or fetal complications were discovered.

Case Report

A 19-year-old gravida 1, para 0, woman with certain dates was initially seen at 10 weeks' gestation for her first obstetric examination. At that time she complained of lower abdominal pain for the previous 3 days that was associated with constipation. She had had no vaginal bleeding. On a pelvic examination there was a tender mass posterior to the uterus in the midline. The patient was sent for a sonogram with a diagnosis of "rule-out ectopic pregnancy." The radiologist's report, even in retrospect, showed ". . . single intrauterine live pregnancy at 10 weeks' gestation." The patient was advised to return if the cramps worsened or if she had bleeding.

At 23 weeks, the patient complained of cramping again and experienced a syncopal episode at home. Good growth parameters were reported on sonographic examination, and the infant appeared to be normal and in breech position. At 35 weeks' gestation, a sonogram was again repeated because of a slight bloody discharge. The baby was noted still to be in frank breech presentation, and the placenta was reported as fundal.

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The patient was brought to the labor and delivery suite at 39 weeks' gestation complaining of regular cramps and bloody show. Upon examination, the cervix was extremely high and could not be palpated. Because of the possibility of primigravida breech in early labor, a decision was made to proceed with delivery by Cesarean section.

When the peritoneum was opened, a large number of varicosities were encountered on what was thought to be the lower uterine segment. A viable male infant weighing 3655 g (8 lb 1 oz) was delivered through a low transverse incision. Apgar scores at 1 and 5 minutes were 8 and 9. At this point there was tremendous bleeding. An attempt to deliver the placenta was made, but no relation to normal anatomy was apparent. The placenta seemed to be contiguous with what was thought to be the interior of the uterus. Tubes and ovaries could not be identified, and a surgeon was immediately consulted.

After several units of blood were given and a great deal of exploration, it finally became apparent that the cavity from which the infant had been delivered was not the uterus but a large "gestational sac" with placenta, all totally external to the uterus. The uterus was finally recognized as a small vestigial-appearing organ adjacent to the mass. Only at this point was the diagnosis of abdominal pregnancy clear.

Placental tissue was removed as completely as possible; however, some placenta remained attached to the uterus, bladder, bowel, and peritoneum. The patient received 5 units of blood, but was discharged from the hospital after 3 days.

Literature Review

Incidence

Recent data from several US perinatal data bases were compiled by Atrash, et al.,[1] who estimated there are 10.9 abdominal pregnancies per 100,000 births.

The risk of death from abdominal pregnancy has decreased steadily. Atrash and colleagues found that only 3 to 4 women per year die in the

United States from abdominal pregnancy, which is about 5.1 deaths per 1000 abdominal pregnancies. Nevertheless, this figure is 90 times higher than mortality from intrauterine pregnancy. The infant seems at greatest risk, with a mortality rate from 40 to 95 percent.[2] Fetal abnormalities are also common and are reported in 30 to 100 percent of survivors.[3-6]

Diagnosis

Most advanced abdominal pregnancies are not correctly diagnosed until laparotomy, and surgery often follows a prolonged latent stage of "labor," fetal distress, abnormal position, or failed induction.[7]

Although ultrasonic scanning remains the current diagnostic tool of choice,[8] a review of recent literature shows that a sonographic examination failed to confirm abdominal pregnancy in most cases — even on repeated scans.[9,10] Worse yet, a sonogram might give the physician a false sense of security when the finding for abdominal pregnancy is reported as negative.

Magnetic resonance imaging (MRI) has been used successfully to diagnose abdominal pregnancy[11] but is much more expensive, and the effects of MRI upon the developing fetus are not known at this time.

Management

Management is, of course, surgical. Because of the high incidence of maternal complications and the improbability of a normal, viable fetus, surgery is usually recommended immediately after diagnosis.[12] A few patients, however, have been cared for through advanced abdominal pregnancies (more than 20 weeks) while in the hospital, with blood available, until the fetus reached a viable stage.[13]

Blood loss is usually great during surgery because of the trophoblastic invasion of multiple organs. Recommendations vary from leaving the placenta intact in the abdomen (where resorption could take months or years) to careful dissection and ligation of as much placenta as possible.[14] Either way, complications from extensive adhesions, ureteral injury, or bowel injury are common.

Conclusion

Even though the incidence of abdominal pregnancy is very low, diagnosis is difficult, and the outcome can be disastrous. The physician must, therefore, be alert to the possibility of abdominal pregnancy and correlate clinical findings with careful imaging procedures if the diagnosis of abdominal pregnancy is to be made prior to surgery.

In this particular case the parents believe that the birth of this baby was a double miracle — first because mother and baby are healthy, and second because if the condition had been diagnosed at an early stage, the pregnancy would surely have been terminated.

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