



A case of heterotopic cesarean scar pregnancy

Uludağ S, Özel A, Uludağ S, Korkmaz O, Erenel H, Davutoğlu EA, Madazlı R
İSTANBUL UNIVERSITY CERRAHPASA MEDICAL FACULTY, Istanbul, Turkey

Objective

To present a case of heterotopic cesarean scar pregnancy with spontaneous cycle and unusual outcome.

Methods

This is a case report.

Results

A 34-year-old woman (gravida 2, para 1) was referred to perinatology clinic of Istanbul University Medical Faculty of Cerrahpasa, with vaginal bleeding for two days. Her last menstrual period had been eight weeks before. Her obstetric history included one delivery by lower segment cesarean section three years ago. Past medical history included atrial septal defect operation. Her physical examination was found normal. Transvaginal ultrasonography demonstrated a normal uterus and two gestational sacs. One of the gestational sacs was located in the uterine cavity with fetal cardiac activity, whereas the other was found within the previous cesarean scar without fetal cardiac activity (CRL measured 10.1 mm, 7 weeks). We hoped that the scar pregnancy would dissolve and followed the patient with her consent. At 20 weeks of gestation, the patient was referred to our perinatology clinic with vaginal bleeding again. Vital signs were stable. Transabdominal ultrasonography demonstrated that the fetus located in the uterine cavity was healthy. The scar pregnancy sac was clearly identified with the missed embryo. There was a 7,8 × 3,4 cm hematoma between the scar pregnancy sac and anterior myometrial wall. The patient was hospitalized for a week. Bleeding and other symptoms were evaluated. Blood transfusion was not needed. The patient was discharged and followed with two-week intervals until 32 weeks of gestation uneventfully. Hematoma got smaller and smaller. At the 32 weeks and 5 days of pregnancy, the patient was admitted to the emergency room with vaginal bleeding and abdominal pain. Physical examination revealed a blood pressure of 80/50 mmHg, a pulse rate of 100/min and a body temperature of 36.5°C. In abdominal examination a uterus with tenderness and regular contractions was found. Transabdominal sonography showed fetal bradycardia. Emergency cesarean was planned due to suspicion of placenta abruption. A female fetus, measuring 1800 g, was delivered with 3 -5 Apgar scores. Nearly half of the placenta was detached from the uterus. Preoperatively, the patient's hemoglobin concentration was 10 g/dL, intraoperatively, it declined to 8.8 g/dL. Four units of packed red blood cells and four units of packed FFP were transfused. The heterotopic cesarean scar pregnancy mass was removed and sent to pathology department. The defect was repaired by continuous sutures. After cesarean operation, the patient was transported to intensive care unit due to hypoperfusion symptoms. She was discharged from the hospital five days after delivery.

Conclusion

The incidence of heterotopic cesarean scar pregnancy (HCSP) during spontaneous cycles is extremely low (1:10.000). The exact cause and mechanism is currently not understood. The most probable mechanism that can explain scar implantation is that there is an invasion of the myometrium through a microtubular tract between the cesarean section scar and the endometrial canal. This tract can also develop from trauma arising from other uterine surgery such as curettage, myomectomy, metroplasty, hysteroscopy and the manual removal of placenta. Management of HCSP is challenging, especially when the woman desires preservation of the concurrent intrauterine pregnancy. Ectopic pregnancy located within the cesarean section scar tissue has a high risk of rupture and bleeding. Treatment options for cesarean scar pregnancy include transvaginal embryo aspiration, local or systemic methotrexate therapies, and potassium chloride injection. Placentotoxic agents may be harmful for the intrauterine fetus with possible side effects. Salomon et al. reported the results of potassium chloride injection into the heterotopic cesarean scar pregnancy. They found an amorphous bulging mass along the embryo reduction site when they performed cesarean section for the viable fetus. Pathologic examination demonstrated residual placental and deciduous tissues, which could be predisposing factors for uterine rupture during uterine contractions. Other managements include expectant management and laparoscopic removal.

Laparoscopic excision of the scar pregnancy should be used in cases with stable vital signs and by a well trained surgeon. Generally, expectant management is not recommended, because ongoing HCSP can lead to massive uterine bleeding, rupture of the uterus and hysterectomy, even in an otherwise uneventful term pregnancy.

