Four cases of cesarean scar ectopic pregnancy: Single centre experience

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Objective

The implantation of a pregnancy within the previous cesarean scar is one of the rarest ectopic pregnancy locations. We present four cases of caesarean scar pregnancy (csp) diagnosed within a 6-month period and managed with different options (surgical and medical treatment).

Methods

To report four cases of cesarean scar ectopic pregnancies.

Results

Case 1: A 25-year-old woman gravida 3, para 1 with a previous history of lower segment cesarean and an elective termination of a pregnancy at 8 weeks was performed. The patient was referred to our unit at 7 weeks of gestation for a suspected ectopic pregnancy. On examination, there was no vaginal bleeding, the cervix was closed, and the uterus was not enlarged. An ultrasound scan imaging revealed that the uterine cavity and cervical canal were empty, the gestational sac implanted in the anterior wall of the uterus at the level of uterine isthmus (figure 1.). The fetal CRL was compatible with 8 weeks and fetal cardiac activity was detected. The myometrium was very thin between the bladder and the gestational sac. A diagnosis of cesarean scar ectopic pregnancy was made. The patient didn't accept medical treatment. Wedge resection and repair of the implantation site were made via laparotomy. A mass was palpable under the uterovesical peritoneal reflection, and the peritoneum was opened at this point. No complications occurred during surgery. Blood loss was minimal and blood transfusion was not required during the operation. She was discharged without any problem two days after the operation. Case 2: A 35 year-old woman gravida 2 para 1 was admitted to our clinic at 7 weeks' gestation regarding routin control. The patient had no symptoms. The obstetric history included one low-transverse cesarean section at term. We performed ultrasound scan imaging and we saw that the uterine cavity and cervical canal were empty, the gestational sac implanted in the anterior wall of the uterus at the level of uterine isthmus. The fetal CRL was 3, 3 mm with fetal cardiac activity and the serum β-hCG was 11, 200 iu/l. After extensive counseling, the pregnancy was terminated by ultrasound-guided transcervical kcl injection. After this, transabdominal ultrasound-guided intra-amniotic injection of 75 mg methotrexate was performed with 20-g needle under local anaesthetic. Ultrasound did not find any mass after methotrexate administration. Case 3: A 44 year-old woman gravida 2 para 1 with two previous lower segment cesarean deliveries was admitted to our clinic at 7 weeks' gestation for a suspected ectopic pregnancy. The diagnosis was confirmed by transvaginal sonographic examinations showing a well-formed gestational sac with a yolk sac, but no viable embryo, in the myometrium of the lower uterine segment. Under intravenous sedation, an intra-amniotic injection of 50 mg methotrexate was performed with transvaginal ultrasound guidance. 5 days later, the patient's serum β-hCG value had risen and the same treatment was repeated with 75 mg of methotrexate transvaginally. One week later she was discharged and the patient did not suffer any side effects. A follow-up ultrasound showed resolution of the gestational sac. Case 4: A 31 year-old woman gravida 5, para 2, with history of two dilatation and curettage (D&C) and two previous cesarean sections was admitted to our clinic at 8 weeks' gestation with diagnosis of csp. Transvaginal ultrasound revealed a 6 weeks non-viable singleton gestation that appeared fixed within the myometrium anterior to the cervix and next to the bladder. The first day, she received 75 mg methotrexate intramuscular (im). Serum β-hCG levels were checked at 4 day, increased to 12, 000 mIU/ml and remained elevated at 7 days with 3, 085 mIU/ml. A second dose of 75 mg methotrexate im was administered due to persistent ectopic pregnancy. Two days later, she reported passage of blood and some tissue. A subsequent D&C was made under general anesthesia with no complication. She was discharged home in a stable condition 3 days after surgery.

Conclusion

Csp is a potentially life-threatening condition that if it is not detected and managed early can result in uterine rupture, hemorrhage and finally maternal death. Due to the increase incidence of caesarean section, more cases are diagnosed. Ultrasonography is the most important diagnostic tool and color doppler imaging should be used. The cause of this condition and the best management are unclear but early diagnosis and appropriate treatment is crucially important to prevent serious complications.