

Case report:

Caesarean scar ectopic pregnancy

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Abstract

Uterine scar pregnancy is a gestation separate from the endometrial cavity and completely surrounded by myometrium and the fibrous tissue of the scar. We report a case of caesarean scar pregnancy, which was diagnosed only late in the course of events but managed successfully medically.

Key words: Caesarean scar, ectopic pregnancy, Dilatation and curettage, methotrexate.

Case report:

A 32 year old woman was admitted with history of bleeding per vaginum of 2 weeks duration. She was second gravida, with history of lower segment Caesarian section for the first pregnancy. Her last menstrual period was on February 20th 2008 and she took tablets of Mifepristone 600 mg and Misoprostol 400 µg for procuring abortion on 4-4-08. But the products were not expelled; instead she continued to have bleeding per vaginum for the next 3 weeks. β HCG done on 12-05-08 showed a value of 1218 i.u./ ml. Vaginal bleeding continued for another 2 weeks. Ultra sonogram on 27-5-08, showed a mass measuring 6.3 x3.8 cm in the endometrium with cystic areas, probably due to incomplete abortion. It was decided to evacuate the pregnancy by dilatation and curretage.

While doing the procedure the patient started bleeding profusely and collapsed. She was revived with intravenous fluids and blood transfusion and other supportive measures. β HCG two days after the procedure was 518.5 IU/ml. The patient had mild bleeding per vaginum and she was kept under observation. Histopathology of the endometrial curettings showed products of gestation.

After eight days, β HCG was 479.7IU/ml and pelvic ultra sonogram on 12-6-08 showed features suggestive of lysed blood in the cavity. On the lower left side, a mass of 61x52 mm size involving the whole of myometrium and reaching just posterior to the urinary bladder was seen. No other adnexal lesions were seen. A provisional diagnosis of Caesarean scar ectopic pregnancy was made. Since the β HCG was not very high and the patient wanted to conserve the uterus, it was decided to give chemotherapy. One course of methotrexate was given in the following dose. (Methotrexate 1mg/m² /day x 4 doses intramuscularly alternating with injection of folinic acid 1mg/day)

The treatment was completed on 20.6.08. β HCG level came down to 63 IU/ml after 11 days of treatment and the patient was discharged. After one month, β HCG was 23 i.u/ml and was normal after 6 weeks. The patient later resumed normal menstruation.



Fig 1

USG Findings- Mass of 61x 52 mm,echogenic area involving the whole myometrium-Hypervascular

Discussion

In our case, ultrasonogram was not done before medical abortion was attempted with tablets of Mifepristone and Misoprostol (prostaglandins). Hence it was thought to be a case of incomplete abortion and evacuation was attempted. We met with torrential haemorrhage and the procedure had to be abandoned. A few bits of products were removed and the histopathological report came as products of gestation. Patient continued to have vaginal bleeding and the ultrasound scan done one week later showed the highly vascular swelling in the myometrium which suggested the possibility of Caesarean scar ectopic pregnancy. The patient responded to methotrexate, and her uterus could be preserved for future childbearing.

Caesarean scar pregnancy is a novel entity in ectopic pregnancies. It refers to a pregnancy implanted into a deficient uterine scar following previous lower segment caesarean section. The most probable mechanism is a microscopic

invasion of the myometrium due to previous trauma or surgery.

The true incidence of this condition is unknown because the literature primarily consists of case reports. However the reports of such pregnancies have grown in the last few years, possibly as a result of increasing number of caesarean sections, new reproductive techniques, improved diagnosis and methods of early detection. Trans Vaginal Ultrasound (TVS) with Doppler is a reliable tool for the diagnosis.

The diagnostic criteria are

1. In a sagittal view of the uterus, uterine cavity and cervical canal should be empty.
2. Development of the gestation sac in the anterior uterine wall at the isthmus
3. Evidence of trophoblastic, functional circulation on Doppler defined by the presence of an area of increased peri-trophoblastic vascularity, absence of a healthy myometrium



Fig 2

A 7 weeks caesarean scar pregnancy showing herniation of gestational sac into myometrial defect

The differential diagnosis includes cervical pregnancy and miscarriage in progress. There are no universally accepted treatment guidelines. Like in the case of other ectopic pregnancies the management can be medical or surgical. Although conservative management is successful in some cases it is associated with prolonged vaginal bleeding which may last for many months and there is also a risk of infection and sepsis. Non-surgical approaches include systemic methotrexate, direct injection of methotrexate, aspiration of the sac with TVS guidance, direct injection of hyperosmolar glucose, potassium chloride and embolisation

of uterine artery. Curettage is not recommended because it is associated with high risk of uterine perforation and haemorrhage. Surgical treatments include laparotomy, hysterotomy or rarely hysterectomy. The risk of recurrence is low, and provided the next pregnancy is located normally within the uterine cavity, it is likely to be uncomplicated.

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