

Cesarean Scar Ectopic Pregnancy: Case Report and Literature Review

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Abstract : *Caesarean scar pregnancy is a rare form of ectopic pregnancy that can be life threatening and functionally challenging due to haemorrhage or early uterine rupture. We report a case of a scar pregnancy discovered in a patient with a scarred uterus, the patient benefited from a medical treatment completed by a conservative treatment. The interest of an early diagnosis lies in the possibility of choosing an adapted treatment according to the clinical context, the radiological data, the technical platform and the patient's desire.*

Keywords : Cesarean, scar, ectopic, pregnancy

Introduction :

Caesarean scar pregnancy is a rare form of ectopic pregnancy that can be life threatening and functionally challenging due to haemorrhage or early uterine rupture.

Since the advent of endovaginal echography and MRI, it has been possible to assess the diagnosis earlier in the gestation and to use a more conservative approach.

Given the rarity of this situation, there are currently no formal recommendations regarding treatment modalities. Treatment considers gestational age, available treatment options, the patient's desire for subsequent fertility, the experience of the treatment team, and the complications of first-line therapy.

Case report :

A 28 year old female patient with a scarred uterus, one living child, with no notable pathological history, consults for pelvic pain evolving for 1 week.

Clinical examination found a stable patient, gynaecological examination found minimal bleeding from the endocervix, with an enlarged uterus.

A workup was performed showing a BHCG of 3000.

Obstetric ultrasound showed an intrauterine gestational sac adjacent to the scar with no embryonic echo or cardiac activity, no effusion.

The patient was treated with methotrexate with clinical and BHCG monitoring.

As the patient's clinical condition worsened, a laparotomy was performed with conservative treatment.

The evolution was marked by the stabilization of the hemodynamic state and the negativation of the BHCG.

Discussion :

Pregnancy developing in a previous caesarean section scar is rare and must be distinguished from cervicoisthmic implantation [1,2].

The incidence is estimated to be between 1/1800 and 1/2216 pregnancies, and it constitutes 6.1% of all ectopic pregnancies with a history of at least one caesarean delivery [3].

The incriminating risk factors are similar to those for placenta accreta: on the one hand, the number of previous caesarean sections and endo-uterine procedures (curettages, manual uterine revision), on the other hand, in vitro fertilisation (IVF) techniques with embryo transfer have also been incriminated [4].

There are indirect ultrasound signs, such as a decrease in myometrial thickness between the gestational sac and the bladder, which reflects the depth of implantation, and peri-trophoblastic hyper-vascularity as assessed by Doppler. In case of diagnostic doubt persisting after ultrasound, other imaging examinations can be performed such as three-dimensional ultrasound or MRI which allow to understand the anatomical relationships by specifying the depth of trophoblastic invasion in the myometrium, and the potential involvement of the serosa or the bladder as well as the exact position of the gestational sac [5].

Since the advent of endovaginal echography and MRI, it has been possible to assess the diagnosis earlier in the gestation and to use a more conservative approach.

There is not a standard treatment, different therapeutic options have been published including local and/or systemic methotrexate, eventually combined with local injection of KCl, dilatation and curettage (as this is associated with a very high risk for life-threatening haemorrhage, this should not be performed), laparoscopy with removal of the fetal sac and large intracorporal sutures, laparotomy with removal of the caesarean scar pregnancy or with hysterectomy [3]

Conclusion :

Pregnancy in cesarean delivery uterine scar in the first trimester has been encountered more commonly over the last decade, and uterine scar may no longer be the most infrequent site for ectopic implantation.

Early diagnosis and immediate treatment of caesarean scar pregnancy is of utmost importance,

Because the caesarean section rate is still increasing, the incidence of caesarean scar pregnancies will be rising in the future.

Iconography :



Figure 1 : ultrasound image showing pregnancy on scar



Figure 2 : intra-operative image showing pregnancy on scar

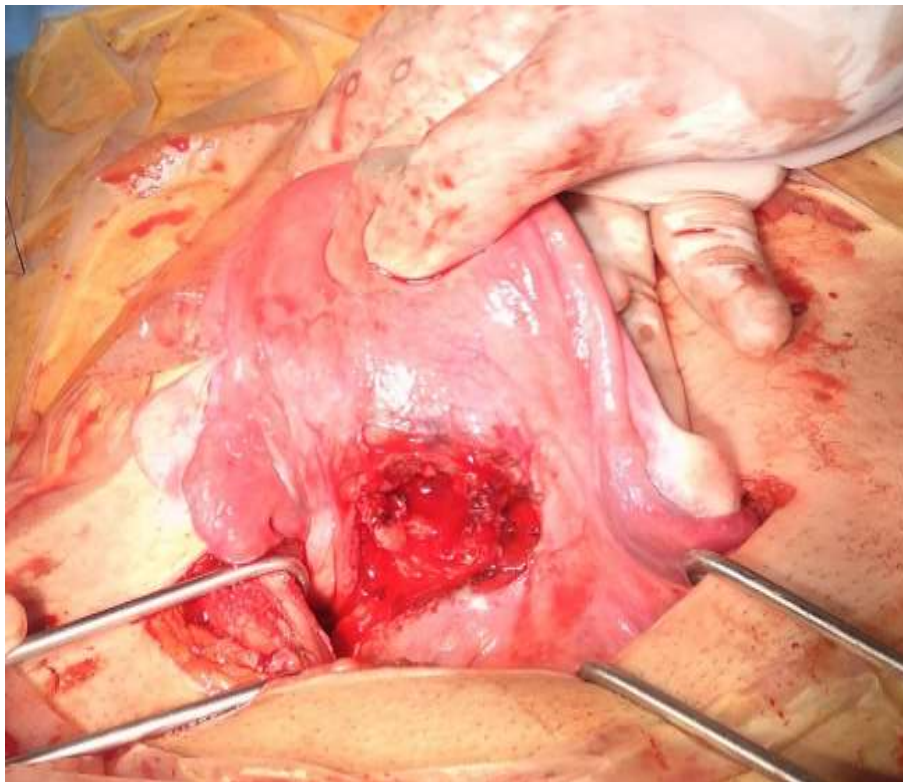


Figure 3 : intra-operative image after the conservative treatment has been performed

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