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Case report

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Placenta accreta in an unscarred uterus: a case report

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Abstract

The placenta accreta is an abnormally adherent placenta. Its incidence increases with increasing rates of caesarean sections. Among its consequences, we first note the haemorrhage of delivery which can be very serious and fatal for the mother, uterine rupture and invasion of adjacent organs. The placenta accreta in unscarred uterus is very rare but possible. We report an interesting case of placenta accreta in an unscarred uterus discovered during an emergency cesarean. A 25-years-old female patient without history of scarred uterus, gravida 1, para 1, pregnant at 39 weeks, admitted to maternity emergency for delivery. During the labor, the parturient presented fetal bradycardia, hence the indication for an emergency cesarean section. The diagnosis of placenta accreta is made during the caesarean. We opted for a conservative treatment because of the age and parity of the patient. The placenta accreta is a pathology at risk of serious haemorrhagic

complications during pregnancy and postpartum. This should encourage us to systematically search the ultrasound criteria for placenta accreta. The ultrasound report, in these patients, should explicitly mention it. Adequate care in the presence of a multidisciplinary team helps limit the mortality and morbidity associated with this pathology.

Introduction

Placenta accreta is a pathological condition in which the placental trophoblast invades the endometrium beyond the Nitabuch's layer due to a defect in the decidua basalis. The incidence of placenta previa was significantly increased in those with a previous caesarean section (1.31%) compared with those with an unscarred uterus (0.75%). The major morbidity associated with such abnormal placentation primary arises from the significant blood loss that occurs at the time of delivery. In addition, pregnancies complicated by placenta accreta are thought to be associated with increased incidences of uterine rupture, invasion of adjacent organs. The placenta accreta in an unscarred uterus is very rare but possible [1]. We report an interesting case of placenta accreta in an unscarred uterus discovered during an emergency caesarean section.

Patient and observation

A 25-year-old woman, gravida 1 para 1, with no history of scar uterus, admitted to the maternity emergency for delivery, 39 weeks pregnant, the follow-up of the pregnancy was normal. The clinical examination found a pulse at 80 beats per minute, blood pressure at 110/60 mm Hg, Temperature at 37, the obstetric examination objectified a fundal height at 31cm, uterine contractions present, fetal heart tones perceived, the vaginal examination showed a soft anterior cervix effaced at 70%, dilated to 2cm, cephalic presentation, membrane ruptured for two hours. The obstetric ultrasound revealed an evolving monofoetal pregnancy, fetal heart rate was normal and regular, fetus in cephalic presentation, measurements corresponding to the term, fetal weight was estimated at 3100g, amniotic fluid was reduced in relation to the rupture of membranes, fundal placenta. During the labor, the parturient presented fetal bradycardia, hence the indication for an emergency cesarean section. Delivery of the placenta was unsuccessful (Figure 1) we opted for a conservative treatment with removal of the placenta associated with uterine padding and vascular ligation, hemostasis was then ensured. The patient was transfused intraoperatively. The post-operative suites were good. Patient declared outgoing on d + 5 of the postoperative period accompanied by her baby.

Discussion

The incidence of placenta accreta has been increasing these last years. This progression seems to be directly correlated to damage or absence of the decidua basalis, the relationship between prior uterine surgery and the risk of placenta previa and accreta is increasingly important. It has been noted that one prior Cesarean delivery doubles the risk of placenta previa in a subsequent pregnancy such that the incidence increases from 0.38 to 0.63%. Placenta accreta becomes more frequent when the placenta is previa, its incidence in this setting being estimated at around 10% [2]. The precise etiology of placenta accreta is unknown, but risk factors exist, since any quantitative or qualitative deficit in the decidua basalis creates an area conducive to an uncontrolled invasion of the trophoblast and therefore the occurrence of a placenta accreta [3]. Risk factors for placenta accreta include prior Cesarean delivery, uterine instrumentation and intrauterine scarring, placenta previa, smoking, maternal age over 35, grand multiparity and recurrent miscarriage, myomectomy. In most cases, the placenta accreta is a combination of several factors [4-7]. Three variants of abnormally invasive placentation are recognised: placenta accreta, in which placental villi invade the surface of the myometrium; placenta increta, in which placental villi extend into the myometrium; and placenta percreta, where the villi penetrate through the myometrium to the uterine serosa and

may invade adjacent organs, such as the bladder. [8,9] Contrary to many reports, where a placenta accreta has been diagnosed in patients with a scar uterus [9], our patient had an unscar uterus and no known risk factor.

The clinic is often silent during pregnancy. The diagnosis is generally suspected before risk factors and explored by ultrasound which has become the main screening tool for women at risk of placenta accreta, and Magnetic Resonance Imaging (MRI) [10,11]. Ultrasound is the first line examination for the detection of placenta accreta, the classically described ultrasound signs are the presence of placental gaps, the absence of a hypoechoic border between the placenta and the myometrium, an interruption of the hyperechoic zone at the interface of the uterine serosa and the bladder, and the presence of a pseudotumoral aspect of the placenta opposite the uterine serosa [10]. MRI is not currently indicated for first-line screening. A recent series evaluated its sensitivity at 88% and its specificity at 100% when used as a second line examination after ultrasound suspicion of placenta accreta [12]. MRI also seems useful to provide precision on the location of the placenta and the possible invasion of adjacent organs, among the diagnostic criteria proposed include an abnormal bulging of the lower segment, heterogeneity of the signal intensity of the placenta in T2, black intraplacental bands in T2 [13]. The diagnosis is sometimes made at the time of delivery such as our case by difficulty of detachment of the placenta. Some differential diagnoses can be problematic during the delivery such as the preserved incarcerated placenta, choriocarcinoma and it is the anatomo-pathological study which decides [14].

Management is based on the caesarean section scheduled for 34 weeks of amenorrhea with a hysterectomy which is considered the "gold standard", and consists of performing a hysterectomy after the birth of the child without attempt of artificial delivery when the diagnosis prenatal of placenta accreta has been performed, or after an attempt at artificial delivery when the diagnosis of placenta accreta is made intraoperatively [10]. This option could reduce maternal morbidity, but it necessarily results in the patient's loss of fertility. Conservative treatment with placenta left in place can be considered in the absence of hemorrhage. In case of moderate bleeding, arterial ligation possibly associated with uterine padding (in case of cesarean section) or arterial embolization (in case of vaginal delivery) can be performed but a hysterectomy must be performed in case of failure or severe hemorrhage from the start. Conservative treatment, leaving all or part of the placenta in place, has been successfully described by several authors [15-18]. Conservative treatment failures have also been the subject of clinical case reports describing the occurrence of secondary hemorrhage distant from the caesarean section, sometimes involving the patient's life-threatening outcome [19]. A retrospective study of 50 cases of placentas accretas, 26 of which benefited initially from conservative treatment (placenta left in place during cesarean section) was published by Bretelle *et al.* [20]. Only five patients (19%) secondarily required a hysterectomy. This therapeutic option therefore seems interesting for patients retaining a desire for pregnancy. In our case, the conservative treatment was successfully carried out.

Conclusion

The placenta accreta is a pathology at risk of serious hemorrhagic complications during pregnancy and postpartum. This should encourage us to better question our patients and to systematically search the ultrasound criteria for placenta accreta in them. Thus, the ultrasound report, in these patients, should explicitly mention it. Adequate care in the presence of a multidisciplinary team helps limit the mortality and morbidity associated with this pathology. Antenatal diagnosis is necessary in order to be able to refer such patients to suitable structures.

Competing interests

The authors no competing interests.

Authors' contributions

CE wrote the paper. SA, AN, AL, NZ, AB contributed by correction of this paper. All the authors read and approved the manuscript.

Figures

Figure 1: placenta accrete fundal in an unscarred uterus

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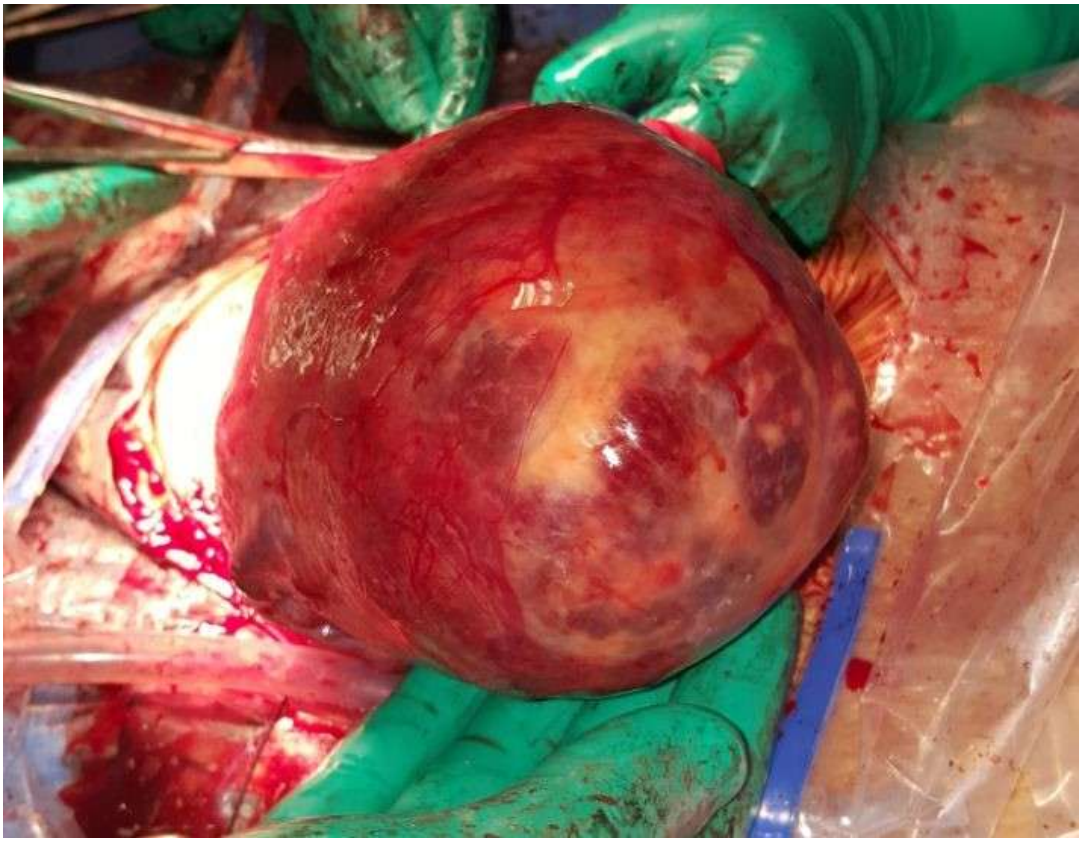

Figure 1: placenta accrete fundal in an unscarred uterus