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Case Report

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SPONTANEOUS RUPTURE OF UNSCARRED UTERUS AT 28 WEEKS OF PREGNANCY: A CASE REPORT

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ABSTRACT

Background: Uterine rupture during the 2nd and 3rd trimester of pregnancy is a rare serious obstetric complication that can cause maternal or fetal death. It mainly occurs in women who have had scarred uterus and it is anecdotal in those with unscared uterus. **Case report:** This case describes spontaneous uterine rupture in a 28-year-old primigravid woman at 28 weeks gestation. Who suffered uterine rupture on an unscarred uetrus. She presented with abdominal pain and no obvious risk factors. Ultrasound showed an empty endometrial cavity extending directly into the amniotic sac. A laparotomy was performed which revealed rupture of the fundus of the uterus with exteriorization of most of the amniotic sac.the pregnancy was removed and the uterine rupture was been repaired. **Conclusion:** Early diagnosis and prompt treatment of uterine rupture may significantly improve prognosis. This severe obstetric complication should be considered even in early gestational age pregnancies and in the absence of known risk factors.

KEYWORDS: Uterine rupture, Non-scarring uterus, Maternal-fetal prognosis.

INTRODUCTION

Rupture of a pregnant uterus is a catastrophic obstetric event with a high maternal and perinatal complication rate.[1] According to one study from the Netherlands, the incidence is between 0.7 and 5.1 per 10,000 deliveries in unscarred and scarred uteri, respectively.[2] It is an extremely rare complication in a patient with a history of spontaneous vaginal deliveries and no obvious risk factors.[2,3] We report a rare case of a primiparous patient who presented a rupture uterus on an unscarred uterus at 28 weeks of amenorrhea (WA).

CASE REPORT

A 34-year-old patient, gravida 1 para 0, at 28 weeks gestation presented to our center with abdominal pain for 3 days and decreased active fetal movement.Until the onset of pain, the patient's pregnancy was uneventful. His medical history included a splenectomy 6 years ago for internal bleeding following a traffic accident. the admission examination finds a haemodynamically stable patient, distended abdomen with tenderness on abdominal palpation with the presence of minimal bleeding of endo-uterine origin, A transabdominal ultrasound showed an empty endometrial cavity in the sagittal plane with a thickness of 15 mm (Figure 1). However, it was not possible to visualize the myometrial fundus. The endometrial cavity continued directly into the amniotic sac which was outside the uterus and contained a nonviable fetus and a normal amount of amniotic fluid. Additionally, intraperitoneal free fluid with mixed internal echogenicity was present; the annexes have not been viewed.

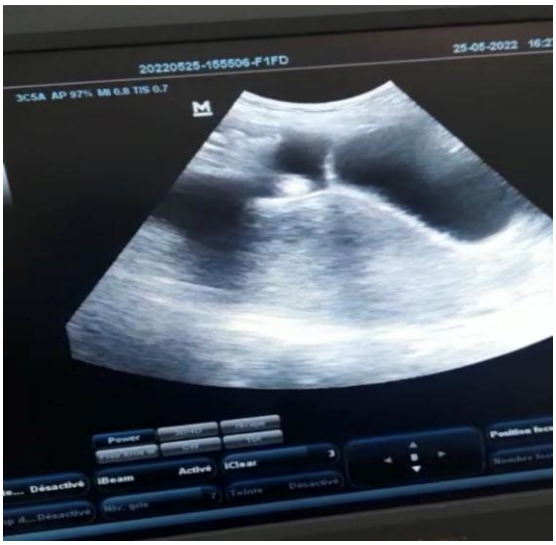
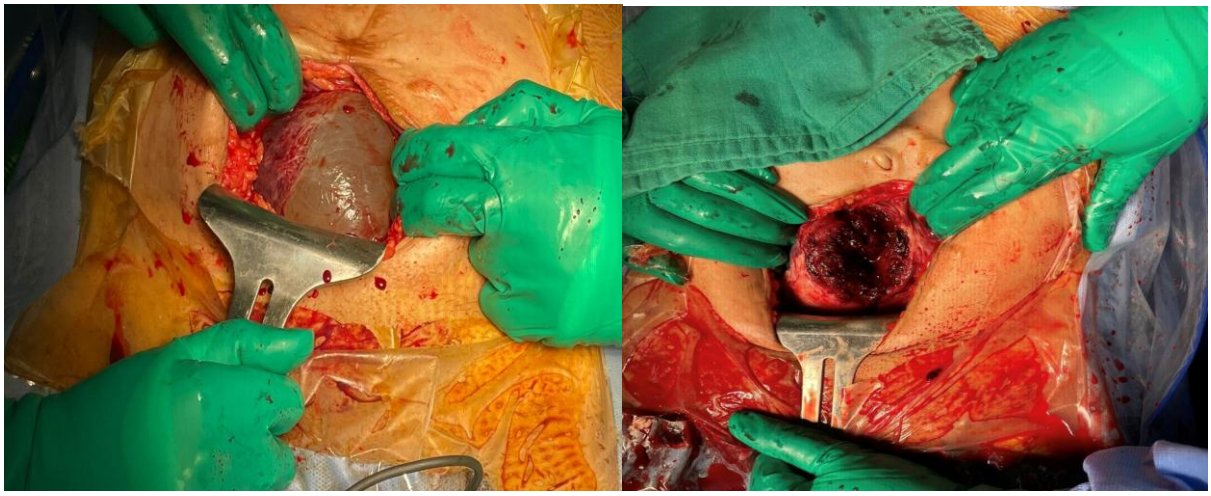


Figure 1 : An empty endometrial cavity in the sagittal plane (Figure 1).

A diagnosis of uterine rupture was made, therefore, an emergency exploratory laparotomy was arranged. Intraoperatively, there was an 8 cm rupture in the anterior uterine wall of the uterine fundus and from which part of the bag of waters escaped, without active bleeding, after extraction of the fetus and placenta, the fundus uterus was repaired in two planes, and hemostasis was assured. figure 2-3.

She recovered well postoperatively and was discharged on Day 10.



Figures 2-3: Intra-operative image demonstrating complete uterine rupture of the anterior wall of the uterus.

DISCUSSION

Uterine rupture is a complete solution of continuity of the uterine wall as well as its serosa. It is considered a rare accident in developed countries, occurring in 1/2000 births, while its incidence is much higher in developing countries, reaching 1/100 births.[4] On a womb non-cicatricial, its frequency is estimated between 1/17,000 and 1/20,000 deliveries.[5]

Several risk factors may contribute to uterine rupture of the gravid uterus in women with no history of uterine surgery, including intrauterine surgery, multiparity, oxytocin stimulation, placenta accreta, Ehlers-Danlos syndrome, cocaine abuse, in-utero exposure to diethylstilbestrol, uterine anomalies, and obstructed labor, for instance, due to undiagnosed fetopelvic disproportion or malpresentation.[6,7,8–9] In our no risk factors are found, which gave this accident a character totally unpredictable.

The clinical presentation of a gravid uterine rupture can include acute abdominal pain, vaginal bleeding, uterine overtone, altered fetal heart rate or fetal bradycardia and, more rarely, hypotension and hypovolemic shock.[10]

Our patient presented a truncated clinical picture. The clinical picture of uterine rupture is generally noisy and the typical signs are violent pelvic pain, tearing, metrorrhagia and instability of the hemodynamic state evolving towards a state of shock.[10,11] In our patient, the poor clinical signs are explained by the fact that the pocket of water remained intact, thus playing a compressive role, preventing the expansion of the bleeding and its diffusion into the abdominal cavity. The clinical picture being misleading, imaging played an important role in the diagnostic process.

Surgical treatment of uterine rupture on a healthy uterus should ideally be conservative in young women wishing to become pregnant, and consists of a simple suture of the rupture. If conservative treatment seems impossible due to the extent of the lesions, a hysterectomy is necessary.[12,13] In our cases, a laparotomy with a uterine defect suture using Vicryl sutures was performed.

CONCLUSION

Uterine rupture on unscared uterus is a rare but serious accident. The clinical picture is usually noisy, but forms incomplete or even pauci-symptomatic can be seen. This serious obstetric complication should be considered even in early gestational age pregnancies and in the absence of known risk factors.

Declarations

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Availability of data and materials

Supporting material is available if further analysis is needed.

Competing interests
The authors declare that they have no competing interests.

Consent for publication
Written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

Ethics approval and consent to participate
Ethics approval has been obtained to proceed with the current study. Written informed consent was obtained from the patient for participation in this publication.

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