Term angular pregnancy with placenta accreta. A case report

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Summary

A 27-year-old primigravida, with two prior adnexal operations, had retained placenta with postpartum haemorrhage following an uncomplicated vaginal delivery. Laparotomic removal revealed placental accretism. Pharmacological treatment (oxytocin and sulprostone) and right cornual resection failed to control profuse bleeding. In the end, subtotal hysterectomy was unavoidable.

Key words: Angular pregnancy; Retained placenta; Placental abdominal removal.

Introduction

Angular pregnancy results from implantation of the embryo medial to the uterotubal junction, in the lateral angle of the uterine cavity. Its incidence is very low, ranging from 0.5% to 1.5% of all ectopic pregnancies [1]. The course of this rare kind of ectopic pregnancy is often complicated by uterine rupture with severe abdominal pain, internal haemorrhage and shock, generally occurring between the 6th and the 12th week of pregnancy [2]. We report a case of an uneventful angular pregnancy with a term vaginal delivery, complicated by severe postpartum haemorrhage as a consequence of placental accretism.

Case Report

A 27-year-old woman, para 0000, was admitted to our Department in early active labour at 41 weeks' gestation. Pregnancy had been previously uneventful, except for slight vaginal bleeding in the first trimester. Her past gynecological history included a laparotomic left adnexectomy for a large dermoid cyst (1994) and laparoscopic dermoid cyst excision of the right ovary (2000). In these circumstances, uterine morphology resulted as normal. Labour proceeded spontaneously and three hours later a male fetus, weighing 3,150 g with an Apgar score of 9-10 was delivered. After a 30-minute third stage, manual removal of retained placenta under general anesthesia was attempted, but this manoeuvre was unsuccessful, owing to the angular location, and was followed by incessant bleeding. Exploratory laparotomy was immediately performed. Abdominal inspection revealed a clepsydra-like uterus, asymmetrically enlarged by a thin-walled mass of the right uterine angle. The round ligament and fallopian tube were normal, laterally displaced by the mass. Transverse hysterotomy on the lower uterine segment was performed. The placenta was removed manually with some difficulty, but then bleeding became profuse. After an unsuccessful attempt to tampon the uterine sacculation, resection was performed and the myometral incision was sutured in three layers. Because of persistent uterine

atonia and blood loss resistent to oxytocin (Syntocinon, Novartis Farma®) and sulprostone (Nalador, Aventis Pharma®) infusion, and considering that other surgical procedures were not warranted, subtotal hysterectomy was performed. Total blood loss was estimated to be nearly 1700 ml and four units of packed red blood cells were given intraoperatively. Histological uterine examination revealed a condition of placental accretism. The postoperative course was uneventful and the patient was discharged on the eighth postoperative day.

Discussion

Angular pregnancy usually presents with severe abdominal pain in the upper quadrants, tenderness of the uterus and vaginal bleeding [3] and usually terminates with uterine rupture, most often occurring in the first trimester of gestation [1, 2]. Antepartum diagnosis is often difficult as there are no clear predisposing factors [1, 4]. In our case, in fact, defects of uterine fusion and myomas were absent, as previous surgery and laparotomic inspection showed. Ultrasound may have an important role in detecting an eccentric implantation of the gestational sac during the first half of pregnancy [2]. However, as reported in the literature [4] and our case shows, pregnancy can have a completely asymptomatic course. For this reason, often, one may run up against this rare obstetrical complication during delivery. In a fullterm pregnancy, angular implatantion should be considered when a retained placenta is associated with inability to reach the implantation placental site for manual extraction. In this condition, the possibility of placental accretism or severe haemorrhage may require removal of the placenta through laparotomy. According to the literature, this surgery is useful from a diagnostic and therapeutic point of view [2, 4]. At the time of laparotomy, the diagnosis of angular pregnancy was confirmed by satisfying two of the three criteria proposed: 1) direct observation of lateral distension of the uterus with lateral displacement of the round ligament reflection and 2) retention of the placenta in the uterine angle [2]. Some

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authors perform a hysterotomy in the implantation site for placental removal, however we preferred a transverse incision on the lower uterine segment to minimize blood loss [5]. In the above-reported case the procedure was conclusive while in our case, after removal of the placenta and thinning uterine wall, further bleeding occurred due to uterine atonia, probably linked to the manipulation suffered by the uterus. Since haemorrhage was unresponsive to pharmacological therapy and conservative surgical treatment by the B-Lynch suture [6] did not warrant haemostasis, subtotal hysterectomy was considered the unique adoptable precaution. Finally, we can affirm that our observation is similar to other reports (lack of symptomatology, difficulty in antepartum diagnosis, resort to hysterotomy for placental removal), but is different for placental accretism. This possible complication must always be considered and must lead to timely placental removal by laparotomy. During surgery it is advisable to evaluate the assurances offered by conservative treatment (removal of uterine sacculation, B-Lynch suture in the case of uterine atonia) and only if these are absent, the recourse to hysterectomy is unavoidable.

References

- [1] Lancet M., Bin-Nun I., Kessler I.: "Angular and interstitial pregnancy". Int. Surg., 1977, 62 (2), 107.
- [2] Jansen R.P.S., Elliott P.M.: "Angular intrauterine pregnancy". Obstet. Gynecol., 1981, 58, 167.
- [3] Lamaina V., Litta P., Sandri A., Nardelli G.B.: "Angular pregnancy. Clinical management". Clin. Exp. Obstet. Gynecol., 1991, 18 (2), 133.
- [4] Stiller R.J., de Regt R.H.: "Prenatal diagnosis of angular pregnancy". J. Clin. Ultrasound, 1991, 19, 374.
- [5] Deckers E.A., Stamm C.A., Naake V.L., Dunn T.S., McFee J.G.: "Hysterotomy for retained placenta in a term angular pregnancy. A case report". J. Reprod. Med., 2000, 45 (2), 153.
- [6] B-Lynch C., Coker A., Lawal A.H., Abu J., Cowen M.J.: "The B-Lynch surgical procedure for the control of massive postpartum haemorrhage: an alternative to hysterectomy? Five cases reported". Br. J. Obstet. Gynaecol., 1997, 104, 372.

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