

Placenta percreta presenting in the first trimester and resulting in severe consumption coagulopathy and hysterectomy: a case report

J.C. Papadakis¹, M.D.; N. Christodoulou², M.D.; A. Papageorgiou¹, M.D.; M. Rasidaki¹, M.D.

¹Department of Obstetrics and Gynecology; ²Department of General Surgery, Leoforos Knossou, Heraklion, Crete (Greece)

Summary

Placenta percreta complicating pregnancy in the first trimester is extremely rare, and only a few cases have been reported in the literature. A patient with risk factors for placenta percreta that presented as first trimester fetal demise, unresponsive to medical management with prostaglandin, is presented. The patient required an emergency hysterectomy to control the bleeding after uterine curettage which was complicated by severe consumption coagulopathy. This rare entity can lead to significant mortality and morbidity, particularly in the background of an increased prevalence of the disease and its associated risk factors, and the large number of spontaneous and induced abortions performed worldwide.

Key words: Placenta percreta; Early pregnancy; Placenta accreta; First trimester.

Introduction

Placenta percreta is a rare and potentially life-threatening complication of pregnancy. It is most commonly identified during the third trimester and at delivery, when difficulty with removal of the placenta is noted, usually causing massive intrapartum or postpartum hemorrhage. There are only a few reports of placenta accreta presenting in the first trimester, while placenta percreta is exceedingly rare in early pregnancy. We report a case of placenta percreta presenting in the first trimester with profuse hemorrhage following D&C for fetal demise and resulting in severe consumption coagulopathy and hysterectomy.

Case Report

A 36-year-old woman, gravida 5, para 3, presented to our department 11 weeks after her last menstrual period with mild intermittent vaginal bleeding of one week's duration. Her obstetric history was notable for an uncomplicated vaginal delivery, followed by two low transverse cesarean sections, and an uncomplicated first trimester surgical termination of pregnancy. The first cesarean section was performed because of placental abruption at term, and it was complicated by pulmonary embolism 23 days postpartum.

Pelvic examination revealed a 12-week in size uterus, with a soft and long cervix, and a closed external cervical os. No adnexal mass or tenderness was noted. The laboratory findings were normal with a hemoglobin of 13.1 g/dl, while the urine pregnancy test was positive. Transvaginal ultrasonography showed a non-viable fetus with a crown-rump-length of 3.6 cm, consistent with fetal demise. There was no free fluid in the pouch of Douglas.

The patient opted for medical management of the miscarriage with misoprostol. However, after 24 hours without response, the decision was made to proceed with surgical evacuation of the uterus, with informed consent.

In the operating theatre, a 12-mm suction curette was passed through the dilated cervix and necrotic products of conception were obtained with suction curettage. Profuse hemorrhage occurred soon after starting the procedure. Despite further sharp curettage, administration of 40 units of oxytocin through an intravenous drip, 0.2 mg ergometrine maleate intravenously, and vigorous uterine massage, the bleeding continued. Similarly, local prostaglandin instillation and transvaginal ligation of the descending branches of the uterine arteries proved unsuccessful in controlling the bleeding. An estimated blood loss of 1,700 ml occurred in 20 minutes. The hemoglobin value dropped to 4.4 g/dl while the platelet count dropped to 68,000. Consumptive coagulopathy soon developed, and the prothrombin time increased to 35.0, activated partial thromboplastin time to 110.2, and fibrinogen to 91 mg/dl. The patient showed signs of shock and required vigorous resuscitation with blood, colloid solutions, and fresh frozen plasma. An emergency laparotomy was carried out, keeping uterine perforation in mind. The uterus was found to be adherent to the posterior surface of the bladder, and on exposure perforation of the bladder occurred. There was no intraperitoneal bleeding nor evidence of uterine perforation. However, over the anterior lower uterine segment, a 3-cm in diameter oval purple area of subserosal myometrial hemorrhage was identified. Total abdominal hysterectomy was performed. The estimated intraoperative blood loss was 1,500 ml, and intraoperative fluid replacement included 5,600 ml crystalloid, 2,000 colloid, seven units of packed red blood cells, and four units of fresh frozen plasma. The patient's condition stabilized postoperatively and the consumption coagulopathy soon improved. She was transferred for observation to the intensive care unit where she remained for three days. She subsequently recovered uneventfully and was discharged from our department on the ninth postoperative day.

Pathologic examination of the specimen revealed chorionic villi penetrating throughout the myometrial thickness to the serosa in both the uterine corpus and endocervix with no intervening decidua basalis layer (Figure 1).

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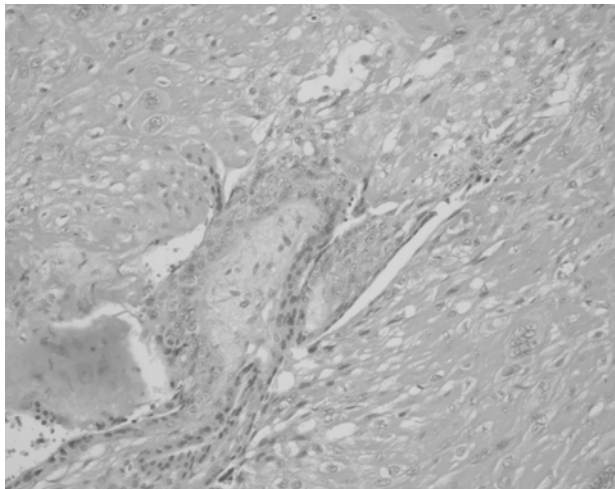


Figure 1. — Chorionic villi penetrating throughout the myometrium (hematoxylin and eosin staining, magnification x 100).

Discussion

Reports of placenta accreta presenting in the first trimester are exceedingly rare, and a MEDLINE search from 1966 to 2007 revealed a total of only seven histologically proven first-trimester cases of placenta percreta [1-7]. The most common clinical manifestation has been severe hemorrhage precipitated by curettage for spontaneous or induced miscarriage.

Anticipating this rare but potentially catastrophic complication of pregnancy at any gestational age is of primary importance, particularly in the presence of risk factors as previous cesarean section, uterine curettage, manual removal of placenta, uterine infection, and other pregnancy-associated complications. This is imperative

for proper preoperative and intraoperative planning, especially regarding the availability of blood products and early resort to hysterectomy, as well as for the proper counseling of patients. A high index of suspicion is still required for these patients, until hopefully in the future, improvements in imaging techniques will enable a more accurate preoperative diagnosis.

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Address reprint requests to:

J.C. PAPADAKIS, M.D.

Department of Obstetrics and Gynaecology
10, M. Mavrogenous Street, Haidari,
12461 Athens (Greece)

e-mail: juanpapadakis@doctors.org.uk