

# Acute Abdomen at 12 Weeks Secondary to Placenta Percreta

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## ABSTRACT

With increasing caesarean section rates during the past decades, a rising trend of placenta percreta is observed. Although rare, placenta percreta can present as acute abdomen due to haemoperitoneum during antepartum period. A 24 years old pregnant lady with two previous caesarean sections, presented in emergency at 12 weeks of gestation with syncope, acute abdominal pain and distension. Ultrasonography revealed an ectopic pregnancy in right adnexa with intraperitoneal haemorrhage. On laparotomy, there was moderate hemoperitoneum, both adnexa were normal and placental tissue was protruding through a bleeding previous caesarean scar. Hysterectomy was done. Histopathological report was consistent with the diagnosis of placenta percreta.

**Key words:** *Placenta percreta. Acute abdomen. Spontaneous uterine rupture. Uterine scar.*

## INTRODUCTION

Acute abdomen during pregnancy is potentially life threatening to both mother and fetus that demands prompt diagnosis and management. Among various causes, placenta percreta, though a rare complication can present with massive intraperitoneal bleed due to uterine rupture in second trimester. Management of such an emergency involves immediate resuscitation of the mother and urgent plan of surgery that commonly requires hysterectomy.<sup>1,2</sup>

We present a case of placenta percreta, which presented as an acute obstetrical emergency at 12 weeks gestation.

## CASE REPORT

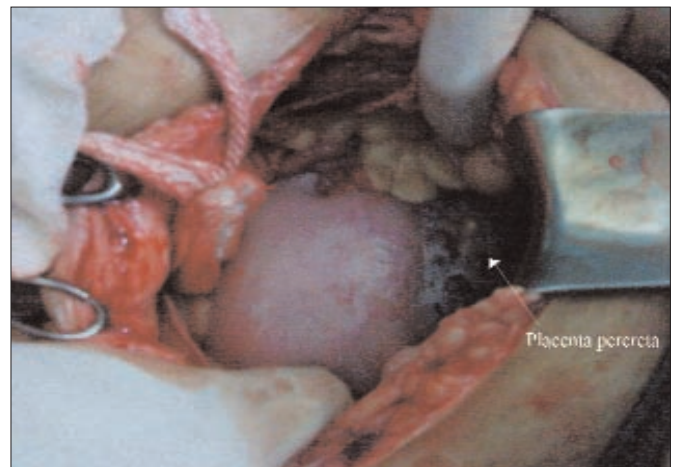
An unbooked 24 years old fifth gravida presented at 12 weeks gestation in emergency with complaints of vomiting, syncope, sharp lower abdominal pain and abdominal distension. She had two previous caesarean sections and two miscarriages, which were followed by suction curettage.

On examination, she was pale. Her pulse rate was 116 per minute and blood pressure was 90/60 mmHg. Her abdomen was tense, tender and distended. Ultrasound examination reported an extrauterine pregnancy corresponding to 12 weeks of gestation located on the right side of the uterus with moderate amount of free fluid in the peritoneal cavity. Hence, a diagnosis of ectopic pregnancy was made.

An emergency laparotomy was done after initial resuscitation. There was about 1.5 litre of blood in the

peritoneal cavity. There was no extrauterine pregnancy. Both the tubes and ovaries were looking normal. The anterior wall of the uterus, at the site of the caesarean scar, was deficient and replaced by placental tissue that was actively bleeding. The placenta was also invading the posterior wall of the bladder (Figure 1). A clinical diagnosis of placenta percreta was made and an attempt to evacuate the uterus was done that failed due to torrential bleeding. Hence, hysterectomy was done. While bladder was reflected, it opened up as placental tissue was invading the posterior aspect. The bladder was repaired in two layers with vicryl 2/0. The total blood loss was approximately 2.5 litres. Six pints of blood were transfused intraoperatively. Her postoperative recovery was uneventful with haemoglobin of 9.2 g/dl. She was discharged on the 6th postoperative day with continuous catheterization of bladder for 3 weeks. She had a regular follow up with no subjective complaints and was continent.

The histopathology of the hysterectomy specimen confirmed the diagnosis of placenta previa with chorionic villi invading the entire thickness of myometrium to the serosa.



**Figure 1:** Invading the posterior wall of the bladder.

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Received March 30, 2009; accepted August 09, 2011.

## DISCUSSION

Placenta percreta is an obstetrical complication that can be life-threatening for both the mother and the fetus. It involves abnormal attachment of the placenta to the myometrium. Three forms of this abnormal placentation are described: placenta accreta, placenta increta and placenta percreta.<sup>1</sup> Literature reports on the frequency of placenta accreta, increta and percreta vary between 1:540 and 1:93000 with an average of 1 in 7000.<sup>3</sup>

In placenta accreta, the chorionic villi grows into deciduas basalis; it is the commonest type of abnormal placentation accounting for 75-78% cases. Placenta increta occurs when the chorionic villi penetrates the uterine muscularis occurring in about 17% cases. Placenta percreta is the severest form in which chorionic villi pass through the uterine myometrium to serosa and is seen in 5-7% cases.<sup>2</sup> This type of placentation not only infiltrates the serosa but also neighbouring structures like urinary bladder and bowel.

A number of predisposing factors have been reported for an abnormal placentation such as previous cervical dilatations and curretages, endometritis, submucous myomas and uterine scars such as those after caesarean section. Clark and colleagues studied the relationship between abnormal placentation and previous caesarean section.<sup>4</sup> According to them, the risk of placenta previa in cases without previous caesarean section is 0.26% that increases to 10% with increasing number of caesarean sections.<sup>4</sup> The incidence of placenta accreta in the presence of placenta previa in an unscarred uterus is 5% and rises to 24% with previous one caesarean section. The incidence further increases to 67% with four or more prior caesarean sections. Shorter the caesarean-to-conception interval, higher is the incidence of abnormally adherent placenta.<sup>5</sup>

Postpartum haemorrhage is the commonest presentation of such abnormal placentation. Placenta percreta can rarely present as a serious complication of uterine rupture leading to hemoperitoneum in early gestation as seen in this case.<sup>6,7</sup> Cases of uterine rupture have been reported due to placenta percreta between 12-28 weeks that presented as an acute obstetrical emergency necessitating urgent laparotomy.<sup>7,8</sup> Both hysterectomy and conservative surgery have been reported. Massive intraperitoneal bleed leading to haemodynamic instability

usually necessitates hysterectomy without evacuating the uterus.<sup>7</sup>

On the other hand, in carefully selected cases of antepartum uterine rupture due to placenta percreta, different conservative surgeries can be undertaken to conserve the uterus. Sewing of the myometrial defect created by the protruding placenta thus prolonging the pregnancy with the achievement of a viable fetus has been reported.<sup>9</sup> Hysterotomy for the delivery of the fetus and gestational sac followed by oversewing of the uterine defect is another type of conservative surgery.<sup>10</sup> Thus, it is imperative that placenta percreta be considered as a differential diagnosis in any patient who presents during antenatal period with acute abdomen and shock.

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