

CERVICAL PLACENTA PERCRETA

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SUMMARY

The clinical picture of placenta accreta has higher incidence today, and is associated with lower parity, placenta previa and individualized management.

A nearly fatal case of cervical placenta percreta is presented in a patient with Premature Rupture of Membranes (PRM) at 18 week's gestation.

INTRODUCTION

Placenta accreta is defined as the abnormal adherence of the placenta to the uterine wall, totally or in part (⁴). Three categories are recognized:

- Placenta accreta vera, chorionic villi in juxta position with the myometrium.
- Placenta increta, villi invading the myometrium but not its full thickness.
- Placenta percreta, villi penetrating through the myometrium to reach or penetrate the serosa (⁸).

Placenta accreta – is a rare but devastating obstetric condition. Many significant changes have taken place in obstetrics lately, that includes improved antepartum and intrapartum care, increased use of cesarean section and improved neonatal care. These changes may reflect a true increase in the incidence of this disease.

Placenta accreta can cause catastrophic maternal haemorrhage, could the diagnosis and challenge the medical staff in the prevention of fatal outcome.

The maternal mortality rate has decreased dramatically in the past 25 years, because of improved anaesthetic techniques, antibiotics and massive volume replacement from blood banks.

Maternal death occurs in 5%-28% of cases. Death is due to haemorrhage despite the availability of blood. The highest mortality rate is associated with vaginal delivery and conservative treatment. The lowest mortality rate is associated with vaginal delivery or cesarean section followed by immediate hysterectomy (³).

Placenta percreta usually comes to the obstetrician's notice because of one of its various complications.

The following case report is an example demonstrating some of the hazards and problems in diagnosis and management of placenta percreta.

CASE REPORT

A 23 year old female was referred to the hospital at the 18th week of her second pregnancy, because of premature rupture of membranes. Her first pregnancy resulted in induced abortion. The present pregnancy had progressed uneventfully until her admission to hospital.

Examination on admission showed general good condition, blood pressure 100/60, pulse rate 88 beats/min. On vaginal examination the uterine cervix was dilated up to 5 cm effaced 50% and there was slight bleeding. The uterine size correlated well with the L.M.P. Hb-11.8 gr%, WBC - 7500/mm³, glucose, urea and electrolytes within normal limits.

Infusion of glucose 5% with pitocin was started, and seven hours later a fetus weighing 300 gr was expelled.

The placenta did not separate spontaneously for 40 minutes, therefore, a manual removal of placenta, under general anaesthesia was indicated.

There was difficulty in separation of placenta, because of absence of a cleavage plane. The placenta was found to be inserted into the lower uterine segment.

Heavy bleeding, circulatory collapse and symptoms of shock were seen, which necessitated immediate laparotomy.

At laparotomy, no freed blood was found in the abdominal cavity. The uterus was slightly enlarged, contracted, overriding a big haematoma that was seen between the broad ligament in the left side, and under the peritoneum of the urinary vesicle in front and between the uterus and rectum from behind. The left adnex was found over this big haematoma.

Upon opening the left broad ligament a large cervical tear was seen from the internal os till 2 cm of external os.

Inside the cervical canal segments of the placenta were seen.

Volume replacement was achieved by multiple intravenous infusion of fresh blood, but signs of DIC appeared.

The platelet count was 37,000, PT - 20%, fibrinogen - 146 mg% and bleeding time was prolonged.

It was impossible to perform conservative treatment because of wide cervical tear, heavy bleeding, coagulation - lysis problems, and therefore a total hysterectomy was indicated and duly performed.

At the end of the operation, the condition of the patient improved. The PT - 80%, fibrinogen - 482 mg%, Platelets - 56,000, HB - 10.8 gr%.

On the 4th postoperative day septic fever appeared despite massive treatment with antibiotics.

Because of signs of acute peritonitis and ileus a second laparotomy was done. Collections of bloody fluids were found dispersed in the abdomen and drained off. Enterobacter and coli were found in cultures.

Meanwhile, dyspnea and Rt. low back pains appeared.

Pleural effusion was found and 950 cc were removed by puncture. The culture was sterile. Under the combination of garamycin, tobramycin and clindamycin the fever subsided and her general condition improved.

The remainder of the postoperative course was uneventful, and the patient left hospital on the 24th postoperative day.

The pathological examination: in microscopic examination we can find chorionic villi all over the uterine wall penetrating the uterine muscle, almost reaching the serosa (fig. 1).

We can see the lack of decidual layer between the villi and the uterine muscle, which is a typical finding in placenta percreta (fig. 2).

DISCUSSION

Accretic development has been reported to occur as early as the 12th week of pregnancy (¹). In another report, at the 18th week of pregnancy, a dilatation and curettage after an incomplete abortion failed to control haemorrhage, and hysterectomy was performed, revealing a placenta accreta (¹). These cases of early detection indicate that, at least in some instances, placenta accreta does not develop in later months as a result of secondary disappearance or absorption of the decidua, but may develop during the process of implantation and placental development.

This patient was first seen with a clinical picture suggesting cervical incompetence due to previous curettage. Among the factors associated with placenta accreta we meet prior D+C.

In Fox's survey (³) a previous uterine curettage was found in 30.2% of cases. In 120 out of 188 patients only one curettage had been performed.

In another study (⁷), 27% of placenta accreta had previous curettage. Other uterine insults frequently mentioned as possible predisposing factors are previous

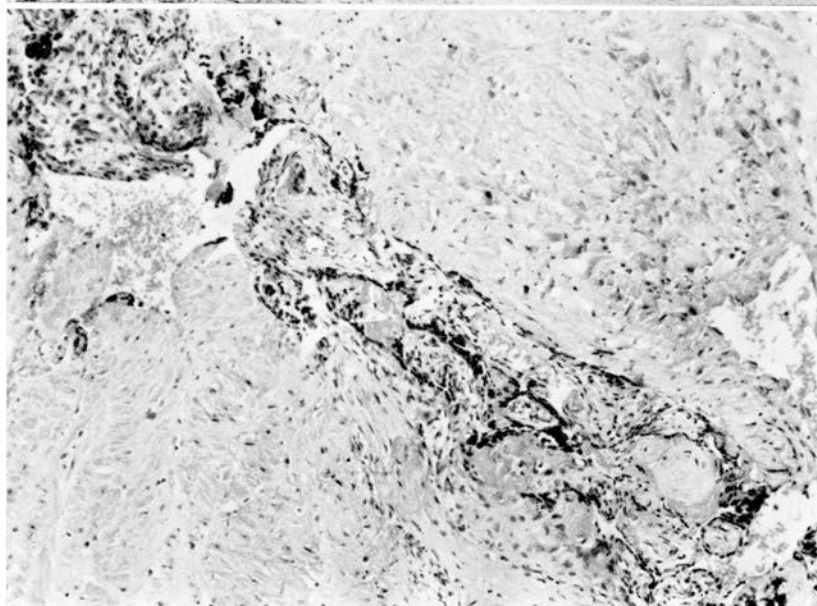


Fig. 1. — Chorionic villi penetrating the uterine muscle. (Mag. 1×40).

Fig. 2. — The decidual layer is missing between the chorionic villi and the uterus. (Mag. 1×100).

cesarean section, manual removal of placenta, placenta previa, infection, multiparity and adenomyosis⁽⁹⁾.

The incidence has changed notably from previous decades: 1930-50, 1 in 30,739; 1950-60, 1 in 19,012; 1960-70, 1 in 14,780; and 1970 to the present, 1 in 7,270^(2, 5, 10). This change may reflect better case reporting or a true increase in incidence⁽⁷⁾. In order to reflect the true incidence and spectrum of the disease, Fox⁽³⁾ considered important the inclusion of cases without microscopic documentation (because of conservative treatment) but with a strong clinical picture of placenta accreta.

Placenta percreta is less common. Absence of decidua or a poorly developed decidua is a constant pathological feature. No doubt the change in obstetrical philosophy, with the resultant increase of Cesarean Section rate is an important contributor to this change in incidence.

There is a high incidence of implantation of the placenta in the lower uterine segment. The general incidence of placenta previa is approximately 1%. In the study of Read⁽⁷⁾, the most common associated factor is the presence of placenta previa or low lying placenta, 63% of cases. This is significantly higher than that cited in the literature (34.2%) or than the 21.4% cited by Millar⁽⁶⁾.

The intrapartum and postpartum management as reported in the literature has varied. In general, previous conservative management resulted in high maternal mortality⁽³⁾. Because the combination of cesarean section or vaginal delivery with immediate hysterectomy resulted in the lowest mortality, this procedure rapidly became the recommended treatment⁽⁷⁾. Maternal mortality has decreased greatly

from the rate of 37.2% reported before 1934⁽⁴⁾. Fox's review⁽⁷⁾ summarized maternal mortality from 1945-1955 as 10.1% and from 1955-1963 as 9.4%. The incidence reported during the present decade is 4 in 129 cases (3.1%).

The successful avoidance of a maternal death depends upon the immediate availability of trained medical staff to manage massive haemorrhage with circulatory collapse and coagulation difficulties. This patient benefited from an operating team prepared to surgically correct haemorrhage and a blood bank capable of quickly providing adequate blood.

There is no way that one can make a definite diagnosis prior to operation. One may have high index of suspicion in those patients who have had previous uterine surgery and appear with spotting. During pregnancy many factors may be involved in the interrelation between the chorion and decidua basalis, including a simple uneventfully induced abortion which resulted in the unhappy outcome of this case.

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