

PLACENTA PERCRETA IN EARLY GESTATION

Pages with reference to book, From 274 To 275

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Placenta percreta is a rare complication of pregnancy. Although known to the ancients, it was not until 1588 when Plater reported the first case in modern literature¹. Most of the cases are discovered following delivery of a term or near term fetus. This report however describes the rare case discovered in early gestation in a woman undergoing evacuation of uterus for missed abortion.

CASE REPORT

A 35 year old, gravida 6, para S + 0 with four live children and one infantile death was admitted at 12 weeks gestation as a case of missed abortion. She had four uncomplicated vaginal deliveries at term and a lower segment Caesarean section 4 years back for fetal distress. The current pregnancy had been uneventful until the 9th week when she started bleeding per vaginum which continued intermittently for 19 days. Physical examination revealed a uterus of 10 weeks gestation and slight spotting—otherwise the examination was normal. The pregnancy test on urine was negative and ultrasound showed an irregular gestational sac of approximately 10 wks. size. A diagnosis of missed abortion was made and the patient was admitted for evacuation of uterus. Initial haemoglobin was 8.5 gms which was corrected with two pints of blood transfusion. The serum fibrinogen on two occasions was found to be within the normal range. During dilatation and evacuation procedure, the products were found to be abnormally adherent in the lower part of the anterior wall and following curettage, brisk haemorrhage started. The patient went into hypovolaemic shock with no pulse and an unrecordable blood pressure. Syntocinon infusion and ergometrine failed to control the blood loss and an emergency laparotomy was decided keeping uterine perforation in mind. On opening the abdomen there was no evidence of perforation. The uterus was found to be adherent to the posterior surface of the bladder at the site of previous scar. The area had grayish purple hue and appeared haemorrhagic and ecchymosed. Adhesions were divided and total abdominal hysterectomy was performed. Cut surface of the specimen revealed placenta deeply penetrating the wall of the uterus. The patient thereafter made an uneventful recovery and was discharged on the 8th postoperative day. Histopathological examination of the uterus showed trophoblast deeply invading the myometrium of the anterior wall involving the serosa consistent with placenta percreta.

DISCUSSION

“Placenta Percreta” is a rare and potentially serious complication of pregnancy characterized by abnormal adherence of placenta which may be total, partial or focal. These entities have been described “Placenta Accreta” —in which the villi attach directly to the myometrium without the intervening decidua; “Placenta Increta” - in which the villi invade the myometrium and Placenta Percreta in which the villi penetrating the myometrium reach the serosa and often rupture into peritoneal cavity^{2,3}. Reviewing the literature, the incidence varies from 1:540 to 1:70,000 pregnancies. During the last decade, it has notably increased and this may be either true increase in incidence or the result of better reporting. Highest incidence is reported from Thailand and this may be related to the increased prevalence of trophoblastic disease in Far East^{4,5}. Absence of decidua or poorly developed decidua is a constant pathologic feature in all reported cases, and this supports the accepted theory of endometrial insufficiency as being basic to pathogenesis. Hence any event adversely affecting the endometrium

could result in an invasive placenta upon implantation at that site. Predisposing risk factors include a uterine scar usually from a Caesarean section, uterine curettage, Asherman's syndrome, manual removal of placenta, endometritis, submucous leiomyomata and adenomyosis⁴⁻⁶. In series presented by Fox⁶ a disproportionate number of women were grand multiparas and over 35 years of age. Advanced maternal age and high parity may, therefore, play an important role. Increasing age alone may lead to progressive inadequacy of decidua and account for an increased risk among these patients⁴⁻⁷. A relative deficiency of decidua basalis exists in the lower uterine segment and this explains the frequent coexistence of placenta accreta with placenta praevia^{4,5}. The majority of the reported cases of placenta percreta are in the third trimester with any rare cases observed in early pregnancy. Begnaud et al⁸ reported the earliest case at 6 weeks gestation in a woman undergoing vaginal hysterectomy for pelvic relaxation. Harer¹ reported placenta accreta at 10 weeks gestation in a woman with induced septic abortion. Hornstein et al⁷ reported invasive placenta at 15 weeks gestation in a woman undergoing pregnancy termination. Berchuck & Sokol⁹ observed abnormally adherent placenta confirmed histopathologically in a woman with previous Caesarean section undergoing termination of pregnancy at 18 weeks. Archer and Furlong's case presented as an acute abdomen at 22 weeks¹⁰. These cases of early detection are significant in that they indicate that placenta accreta does not develop in later months as a result of secondary disappearance or absorption of decidua but develops during the process of placentation, enabling it to cause trouble any time thereafter. It can, therefore, be assumed that there may be numerous undiagnosed instances of partial placenta accreta in patients with early incomplete abortions⁴. Our case is different in that the woman presented at 12 weeks gestation as a case of missed abortion. The etiology of missed abortion remains obscure, but it can be postulated that retention of products of conception maybe secondary to placenta accreta⁴. This patient had multiple risk factors that could favour an invasive placenta, namely, previous Caesarean section, advancing age and multiparity. Moreover, there is a known high incidence of low placental implantation in early gestation and this probably favoured placentation at the site of previous scar. In retrospect, the clinical course is quite consistent with the diagnosis of an abnormally invasive placenta, but because of the rarity of the condition at this stage of gestation our provisional diagnosis favoured uterine perforation. Nevertheless placenta percreta should be borne in mind in cases of missed abortion and in differential diagnosis of patients with post abortal abdominal pain and shock, more so in the presence of antecedent risk factors. The treatment of choice is hysterectomy at all stages of gestation, but conservative approach including suture of the bleeding site, uterine and hypogastric artery ligation, and packing of uterine cavity have also been employed with varying degrees of success^{4,5}. Recently Methotrexate has been used in the management of invasive placenta, but this form of therapy awaits further trials¹¹.

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REFERENCES

1. Harer, W.B. Placenta acereta. Report of eight cases. *Am. J. Obstet. Gynecol.*, 1956; 72: 1309.
2. Pritchard, J.A., MacDonald, P.C. and Gant, N.F. *William's Obstetrics*. 17th ed. Norwalk, Appleton Century-Crofts, 1985, p. 712.
3. Phelan, J.P. Placenta accreta, in management of common problems in obstetrics and gynaecology.

Edited by Danici R. Mishell Jr. and Paul F. Brenner, NewJersy, Medical Economics Books, 1988, P. 170.

4. Breen, J.L., Neubecker, R., Gregori, C.A. and Franklin, J.E. Jr. Placenta accreta, incrcra and percreta. A survey of 40 cases. *Obstet. Gynecol.*, 1977; 49 : 43.
5. Read,J.A., Cotton, D.B. and Miller, F.C. Placenta accreta; changing clinical aspects and outcome. *Obstet. Gynecol.*, 1980; 56 : 31.
6. Fox, H. Placenta accreta. *Obstet. Gynaecol. Surv.*, 1972; 27: 475.
7. Hornstein, M.D., Niloff, J.M., Snyder, P.F. and Frigoletto, F.D. Placenta percreta associated with a second-trimester pregnancy termination. *Am. J. Obstet. Gynecol.*, 1984; 150: 1002.
8. Begneaud, W., Dougherty, C.M. and Mickal, A. Placenta accreta in early gestation; report of 2 cases. *Am. J. Obstet. Gynecol.*, 1965; 92 : 267.
9. Berchuck, A. and Sokol, R.J. Previous caesarean section, placenta increta, and uterine rupture in second-trimester abortion. *Am. J. Obstet. Gynecol.*, 1983; 145 : 766,
10. Archer, G.E. and Furlong, L.A. Acute abdomen caused byplacenta percreta in the second trimester. *Am. J. Obstet. Gynecol.*, 1987; 157: 146.
11. Arulkumaran, S. Medical treatment of placenta accreta with methotrexate. *Acta Obstet. Gynecol. Scand.*, 1986; 65: 285.