

PLACENTA DIFFUSA PERCRETA

by

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Introduction

Placenta diffusa though natural in sow and mare is a rare possibility in human beings, if the usual differentiation of the chorion into *chorion frondosum* and *chorion laeve* does not take place (Brews, 1957). Novak and Woodruff (1967) use the term placenta membranacea almost synonymously. The occurrence of this anomaly is attributed to defective decidua allowing deep implantation of the ovum. Placenta diffusa may present as a case of antepartum haemorrhage from central placenta praevia.

Defective decidua may also lead to morbid adherence of the placenta giving rise to placenta accreta or percreta. Placenta percreta is a rare complication of pregnancy in which the chorionic villi penetrate the whole thickness of the uterine wall and reach its serosal covering, sometimes re-rupturing into the peritoneal cavity. Recently, Toongsuwan and Bhadrakom (1973) reported 3 cases of spontaneous rupture of the second trimester gravid uterus due to such a condition and reviewed earlier ten cases. The case presented in this article was recorded at S.S. Hospital, Institute of Medical

Sciences, Banaras Hindu University in 31,200 deliveries between 1957 to 1974. The chief interest of the case lies in that this appears to be a rare instance showing co-existing placenta diffusa and placenta percreta.

CASE REPORT

The patient was a 30 years old, gravida 9 with history of 7 full term normal deliveries, the last child being 2 years old and one spontaneous abortion of 5 months' duration 4 years previously. She was 38 weeks' pregnant by dates and had two severe bleeding episodes unassociated with pain prior to admission on 26th April, 1974.

The history and clinical examination was consistent with the diagnosis of placenta praevia. On examination under anaesthesia and at caesarean section, presence of placenta in the lower uterine segment was confirmed. The placenta was thinner and less spongy than usual and it could not be pushed aside so as to reach the foetal head. Therefore, the placenta had to be cut through to extract the foetus. After removal of the foetus, the placenta did not separate as usual and on exploring the uterine cavity, it was found to be firmly adherent. The uterine wall appeared to be almost deficient at the fundus as a thin papery area of approximately 2 cm. diameter where only the serous covering appeared to be intact showing, however, no rupture into the peritoneal cavity, (fig. 1). A diagnosis of placenta percreta was made and a quick subtotal hysterectomy was performed.

Naked eye examination of the specimen showed that there was no placenta free space inside the uterine cavity and placenta was firmly adherent all over except over a tiny fringe near the internal os. The placental tissue was

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seen deeply burrowing into the uterine wall to varying extent at different places with an area of total loss of uterine muscle at the fundus where a papery thin glistening serous covering could be made out. The placental tissue had extended into the lower uterine segment and covered the internal os.

Histologically sections from different representative sites confirmed the gross findings. The patient made an uneventful recovery and both mother and her baby were discharged in a satisfactory condition on 12th postoperative day.

Discussion

Placenta percreta cannot be diagnosed until an attempt is made at manual removal of the placenta. High incidence of placenta praevia with morbidly adherent placenta is well recognised (Donald, 1969). The cause is considered to be primarily the result of a defective decidual reaction rather than the result of previous trauma such as curettage and manual removal of the placenta.

Placenta accreta or percreta is particularly dangerous from two aspects: (i) Attempts at manual removal are associated with shock and severe bleeding. (ii) The abnormally opened uterine decidual or myometrial vessels in placenta accreta at caesarean section may serve as points of entry of thromboplastin rich amniotic fluid into the maternal circulation leading to hypofibrinogenemia (Macafee and Harley, 1963). Rupture of the uterus in cases of placenta percreta is not uncommon. In the cases reported previously the uterine rupture usually occurred in the second trimester and was found to be acute and complete (Dick and Devilliers, 1972, Toongsuwan and Bhadrakom, 1973). However, in the present case, though the placental elements had extensively burrowed the myometrium through varying thickness at different places, extending very deeply at the fundus, there was an intact serous layer left over with impend-

ing perforation. Conceivably, a total rupture would have occurred but for a chance surgical interference.

Again in most of the reported cases the rupture has been at the fundus which paradoxically is the thickest portion of the uterus. It would appear that since the fertilised ovum usually implants itself near the fundus and grows in this part of the uterus in the early weeks of the pregnancy, fundus becomes a weak spot due to early erosion by the chorion and is often involved in rupture in cases of placenta percreta.

Summary

Placenta diffusa associated with placenta percreta, an extremely rare association, is reported. Antepartum haemorrhage was the main presenting feature but a "Silent Incomplete Rupture" of the uterus was detected at laparotomy. Possible reasons for the predilection site of rupture by placenta diffusa percreta at the fundus of the uterus are briefly discussed.

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See Fig. on Art Paper VI