PLACENTA ACCRETA - CHANGING CLINICAL PROFILE

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SUMMARY

Placenta accreta is a rare life - threatening complication of pregnancy and is associated with considerable maternal and perinatal mortality.

In a retrospective study over a period of five years, there were six cases of placenta accreta in 8926 deliveries. An incidence of clinically diagnosed placenta accreta of 1 per 1487 deliveries was found. Hysterectomy was performed in two cases and conservative treatment with Methotrexate was employed in 50% of cases. There was no maternal or perinatal mortality.

The clinical picture of placenta accreta today is one of higher reported incidence, lower parity with successful individualized management and decreasing maternal and perinatal mortality.

INTRODUCTION

Placenta accreta is a rare, life threatening true obstetric emergency. It is defined by Anderson (1971) as an abnormal adherance of placenta to the myometrium due to a focal or diffuse lack of decidua basalis between placental trophoblast & myometrium. To determine the clinical picture, individualized management and outcome, six cases of placenta accreta during the period between March 1987 and July 1992 were reviewed and analysed.

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MATERIALS AND METHODS

Records of all six patients diagnosed as having placenta accreta during the study period were analysed. A pathologic diagnosis was confirmed in two cases in which placental villi could be demonstrated to attach directly to the myometrium without decidua. In the remaining cases, the diagnosis was based on strong clinical grounds at the time the case was managed.

RESULTS

During the study period, 8926 deliveries was recorded at the All India Institute of Medical

Sciences Hospital, for an incidence of diagnosed placenta accreta of 1 per 1487 deliveries (total of six cases of placenta accreta)

Patients Characteristics

The age varied from 22 to 44 years. The parity ranged from 1 to 5. Two patients (33.3%) within the group were primipara. Two of the six patients (33.3%) had undergone a prior miscarriage or abortion.

Associated Conditions

Two patients in the study had prior caesarian section (table I); one had placenta previa associated with placenta accreta. These patients prior caesarian section had been for placenta previa. One patient had prior dilatation and curettage.

Intrapartum Management

The indication for delivery included spontaneous labour in 4 patients (66.6%). In two patients, delivery was by caesarian section (this included one case of central placenta previa). Four patients manifested as postpartum haemorrhage. Two had retained placenta and were diagnosed by the failure of placenta to separate. The women who presented with retained placenta, manual removal was tried unsuccessfully. In one patient, lower segment of the uterus was found to be thinned out and therefore, laparotomy was performed, there was incomplete rupture of the lower segment (serosa intact), so adherant placental tissues were removed and the uterus repaired.

Out of two patients who had caesarian delivery, one required hysterectomy because of uncontrolable bleeding from placental bed. In all four cases of vaginal deliveries, curettage and manual removal were unsuccessful.

Hysterectomy was needed in two patients but it was combined with internal iliac artery ligation in one case. (table II) The conservative management with methotrxate was done in three cases successfully.

There was no maternal mortality in the study group and six live born infants were delivered from six patients with 100% survival rate. The Apgar score of 9/10 at 1 and 5

Table I

Factor associated with placenta accreta

Factor	Number	Percent
Multiparity	4	66.6
Placenta Previa	1	16.7
Prior cesarean section	2	33.3
Prior D & C	1	16.7
History of miscarriage or abortion	2	33.3

Table II

Therapeutic maneuvers attempted for placenta accreta

Maneuver	Number	Percent	Percent Successful
Hysterectomy	2	33.3	50
Curettage	3	50.0	0
Internal iliac artery ligation	1	16.7	100
Methotrexate	3	50.0	100

minutes in all six babies reflects the good outcome.

DISCUSSION

As pointed out by Fox (1972) the incidence of placenta accreta will vary depending on the criteria required to confirm the diagnosis. The inclusion of cases without microscopic documentation (because of successful conservative therapy) but with a strong clinical picture of placenta accreta, was considered important to reflect the true incidence and spectrum of the disease. The incidence of 1 in 1487 deliveries in the present series contrasts with the 1 in 2562 deliveries for all clinically diagnosed cases of placenta accreta (Read et al, 1980). The peak incidence of placenta accreta is between 31 to 35 years (Fox 1972).

The hallmark of the disease continues to be multiparity, although there is a trend to a lower parity because of smaller family sizes (Read et al 1980). The 33.3% incidence of primiparas in present study is comparable to 22.7% reported by Read et al (1980). The rate of caesarian section associated with placenta accreta (33.3%) is also comparable with the 27% and 30% incidences reported by Read et al (1980) and Fox (1972) respectively.

The intrapartum and postpartum management as reported in the literature has varied. In general, previous conservative management resulted in a high maternal mortality (Fox 1972). Because the condition of caesarian section or vaginal delivery with immediate hysterectomy resulted in the lowest mortality, this procedure rapidly became the recommended treatment. In the present series, 50% of the cases were managed with methotrexate successfully. A non surgical approach to a case of placenta accreta can involve a cytotoxic therapy because of the sensitivity of the chorionic tissue of the placenta to cytotoxic drugs (Arulkumaran, 1986).

Maternal mortality has decreased greatly from the rate of 10% reported before 1970. There is no maternal mortality in the present study. The fetal mortality in this series (0) is significantly less than the 9.6% stillborn rate cited by Fox (1972). The 64.3% (9 out of 14) and 75% (30 of 40) overall survival rates of Mckeogh and D'Errico (1951) and Breen et al (1977) respectively are significantly lower than the 100% rate (6 of 6) in the present series. Because historically, most intrauterine deaths are due to maternal bleeding complication, ruptured uterus, and antepartum or intrapartum fetal distress, a case can be made for improved mortality rates and survivals being due to frequent use of the caesarian section combined with other modern obstetric management and better antepartum and intrapartum surveillance and improved neonatal care.

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