PLACENTA ACCRETA AND PLACENTA PRAEVIA ACCRETA

by

MALINI A. DESHMUKH*, M.D. (Bom.)

and

RAJNI C. MEHTA**, M.D. (Bom.), D.G.O.

Placenta accreta is a rare complication of pregnancy; but not as rare, as one is led to believe, as quite a number of cases of partial and focal variety are often missed. Post-partum haemorrhage, which follows, is often ascribed to failure of contractility of the uterus. Aaberg and Reid have delineated types of placenta accreta as — (1) Total — involving the entire placenta, (2) Partial — involving one or more cotyledons and (3) Focal — involving part of a single cotyledon.

Incidence

Approximately 250 cases of placenta accreta have been reported in the literature. The reported incidence varies from 1 in 948 reported by Diamsi et al., the highest reported so far, to 1 in 70,000 by Eastman. The overall incidence has been estimated as 1 in 14, 622 deliveries.

In the K. E. M. Hospital, Bombay, we came across 3 cases of placenta accreta, amongst a total of 10,290 deliveries, from January 1961 to December 1963.

The wide variation in the incidence of placenta accreta is probably due to different authors having reference to different aspects of the same condition, as stated by Diamsi et al. The definition and the condition is frequently restricted to the complete type.

Hertig states, that focal accreta may be found in about 10% of the placentas which are removed manually.

The combination of placenta accreta with placenta previa is however an uncommon condition. The name "placenta praevia accreta" was first given to this condition by Shottom and Taylor, who described a case in 1944.

Foster, reviewing the cases of placenta praevia accreta, gives an incidence of the praevia variety as approximately 18% of all cases of placenta accreta. A survey of literature, yields about 47 cases of placenta praevia accreta being reported uptil 1961.

The following is the report of 3 cases of placenta accreta we come across in the K. E. M. Hospital. Out of these, 2 cases were of placenta praevia accreta.

*Honorary Assistant Obstetrician and Gynaecologist.

**Registrar.

K.E.M. Hospital, Parel, Bombay 12.

Received for publication on 18-9-64.

Case No. 1:

S.V.H. aged 36 years, was admitted to the K. E. M. Hospital on 29-9-1961 at 10.45 p.m., with history of 9 months' amenorrhoea and bleeding per vaginam since 9 p.m.

Obstetric history — Para VII 6 F.T.N.D. — living. Last delivery — 3 years ago. On examination — pulse 102/minute B.P. 120/80 mm. of Hg. C.V.S. and R.S. — N.A.D. On abdominal examination — uterus was 32 weeks' size. Breech I, floating. F.H.S. 140/minute, regular. Bleeding per vaginam very slight. Patient was put on expectant line of treatment. On 30-9-61, at 1.30 p.m. patient had a big bout of bleeding. Vaginal examination revealed type IV placenta praevia. Lower segment caesarean section was done under local and then under gas and oxygen anaesthesia. Placenta was in the line of incision, baby was delivered by cutting through the placenta. There was difficulty in removing the placenta; it had to be torn off, as it was found firmly attached to the musculature of the lower segment. The lower segment was sutured after packing. At 4.40 p.m. soon after the operation was over, patient had 3 fits, at intervals of 5 to 7 minutes, and she expired at 5.25 p.m. Post-mortem report: Uterine cavity showed placenta adherent to lower segment of uterus. Lungs — consolidation of left lower lobe and right upper lobe. Pallor of kidneys, spleen, softening of myocardium, slight dilatation of left ventricle.

Microscopic examination of section of uterus — placenta accreta (Fig. 1).

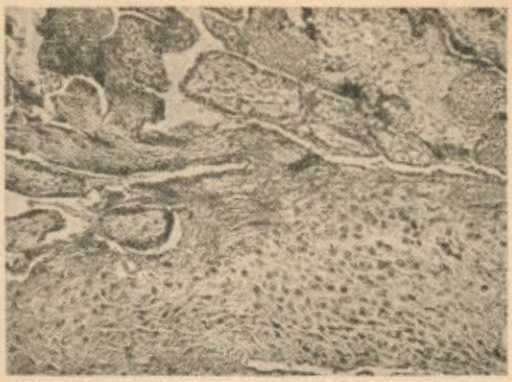

Fig. 1
Photomicrograph shows chorionic villi in direct contact with muscle tissue.

Case No. 2:

L.L. aged 30 years, was admitted, on 24-3-62 at 8.15 a.m. wih history of amenorrhoea — 9 months, swelling of feet and vulva — 15 days, absent foetal movements — 6 days and pain in abdomen 1 day.

Obstetric history: Para V — 3 F.T.N.D. — 2 living, 4th premature still-born. Last delivery—11 months ago.

On examination — nails and conjuctivae pale, pulse 80/minute, B.P. 170/110 mm. of Hg. Oedema — nil, urine — albumin — nil. Abdominal examination — uterus — 34 weeks in size. V I engaged. F.H.S. absent. She was induced with a pitocin drip and delivered a macerated still-born baby at 4.55 a.m. on 27-3-62. Within 10 minutes of delivery, patient started bleeding profusely; manual removal of placenta was attempted, but the placenta was densely adherent, no plane of cleavage could be found. Placenta was removed in bits, some portion still remaining attached to the uterus, but as the patient's general condition was bad, prolonged manipulations were avoided. Blood pressure was not recordable and peripheral pulse not palpable. Blood was pushed in and other resuscitative measures tried, but patient expired at 12.45 a.m. on 28-3-62.

Post-mortem report — Liver showed diffuse hepatic necrosis. Kidneys, brain and lungs — N.A.D. Heart showed softening in right ventricle with infarct. Abdomen — haemorrhage in both broad ligaments and in retroperitoneal space. Uterus —intact, placenta adherent to the posterior wall of uterus. Microscopic examination of section of uterus — placenta accreta (Fig. 2).

Case No. 3:

S.B.J. age 33 years, was admitted, to the K. E. M. Hospital on 21-11-63 for induction of labour, as she had gone 15 days over her due date. She gave history of bleeding per vaginam since morning, no labour pains. Pt. was given expectant line

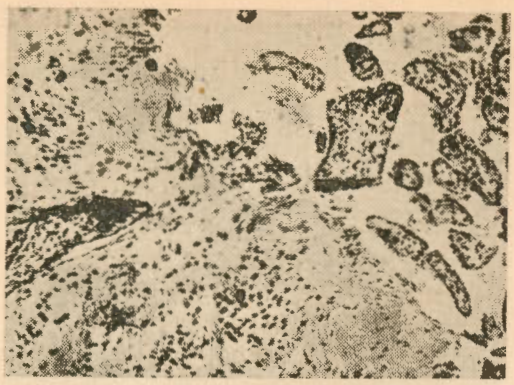

Fig. 2
Photomicrograph shows chorionic villi in direct contact with muscle tissue.

of treatment for suspected placenta praevia — 3 months ago.

Obstetric history — Para III. 1st hydrocephalous and craniotomy, abdomen explored for suspected rupture of uterus, no rupture was found. 2nd F.T. breech delivery, followed by inversion of the uterus in the third stage. Placenta was found to be densely adherent, manual removal of placenta was done and uterus replaced.

On examination — Nails and conjunctiva pink, P 80/minute B.P. 100/70 mm. of Hg. C.V.S. and R.S. — N.A.D. On abdominal examination — uterus was 40 weeks' size. Vertex I floating. F.H.S. — L.A.Q. regular. Bleeding per vaginam present. Due to her previous bad obstetric history and present bleeding per vaginam, lower segment caesarean section was done under spinal anaesthesia. Lower segment was of papery thinness. Baby girl delivered and cried immediately. Since placenta did not separate after 5 minutes, attempts were made at manual removal, no plane of cleavage could be found, a subtotal hysterectomy, was therefore done. The incision on the posterior wall of the uterus, was found to be passing through the placental tissue-- (marginal type of placenta praevia). A total hysterectomy was therefore decided upon, but the anaesthetist reported that the patient had gone into deep shock and her pulse and blood pressure were not recordable. The cut stump was quickly closed, after putting in a small pack in the lower segment. Patient's condition gradually improved. Pack from the lower segment was removed next morning, there was no bleeding. Patient made an uneventful recovery. Examination 3 months later revealed os closed, stump of cervix palpable pelvis normal. Patient gave no history of passing any bits of placental tissue in the lochia. Microscopic examination of uterus — Placenta accreta. At places muscle tissue seen to be replaced by fibrous tissue (Fig. 3).

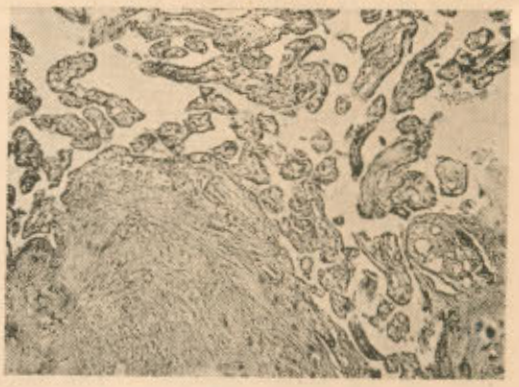

Fig. 3
Photomicrograph shows chorionic villi in direct contact with muscle tissue, which is partly replaced by fibrous tissue.

Discussion

Basically the cause of accretion is any factor which interferes with the development of decidua. In most of the cases, there is usually a history of previous trauma to the endometrium, e.g. manual removal of placenta, curettage or caesarean section. It is however probable that the decidual reaction is deficient originally, which leads to the final result, which is probably the factor in Case No. 3.

Millar believes that the primary decidual deficiency has a hormonal basis.

In the cases reported above, only Case No. 3, gave a history of manual removal of placenta, in previous pre-

gnancy, her uterine wall was also extremely thin, which led to the erroneous diagnosis of ruptured uterus, during her first delivery. During her present delivery, although she was not in labour, when taken up for caesarean section, her lower segment was thinned and ballooned, as seen in cases of obstructed labour.

However, the cause of accretion still remains obscure in a large number of cases. Whatever may be the cause, the most important aspect of placenta accreta is early recognition of the condition and correct decision as regards treatment.

Whenever cases of placenta accreta were discovered during caesarean section, a survey of the literature shows that mortality was increased, when hysterectomy was not performed; further that mortality was greater following vaginal than abdominal delivery. Foster summarising 45 reported cases, shows that out of 31 who underwent caesarean section and later hysterectomy there were 2 deaths. Out of the 14 who underwent vaginal delivery, 6 ended in manual removal of placenta — all of them died; in the remaining 8, hysterectomy was done resulting in 2 deaths.

Ideally the treatment of choice in patients with placenta accreta is subtotal hysterectomy, but in placenta praevia accreta, total hysterectomy has to be considered.

However, cases have been reported where, in the absence of excessive haemorrhage and in young primiparae, placenta has been left behind. It was observed that in some patients in whom the placenta was left behind, it was not expelled. Possibly there was placental absorption, as occurs in abdominal pregnancy. The above phenomenon was also noticed in Case No. 3, where a portion of the placenta was left in situ, in the lower segment.

It is however imperative, when the placenta is left in situ, that such a patient should be under observation, in readiness for an emergency hysterectomy should excessive bleeding supervene. The factor of sepsis must also be kept in mind.

In the partial or focal variety of placenta accreta the mortality is very high. Usually the delivery is vaginal and ill-advised vigorous attempts, at manual removal are made, before the condition is recognised, Diamsi et al. feel that it is an important and significant cause of immediate and delayed post-partum haemorrhage.

In such cases, attempt to conserve the uterus is a dangerous procedure and may well cost the patient her life. The good results of immediate hysterectomy warrant this procedure, whatever the parity of the patient.

Summary

Three case reports of placenta accreta have been presented, with a short review of the literature and modes of treatment.

Acknowledgement

We thank Dr. S. V. Joglekar, M.S., F.C.P.S., Dean, K. E. M. Hospital and Dr. V. N. Purandare, M.D., F.R.C.S., Honorary Gynaecologist and Obstetrician, K. E. M. Hospital, Bombay, for use of the hospital records.

References

1. Cherry, S. H., Adamsons, K. J. and Phillips, L. L.: Sur. Gynec. & Obst. **112**: 551, 1961.
2. Diamsi, F. T., McGoldrick, D. M. and Grogan, R. H.: Am. J. Obst. & Gynec. **87**: 190, 1963.
3. Eastman, N. J.: William's Obstetrics, ed. 12., New York, Applenton-Century Crofts Ic., pp. 1004-1005.
4. Foster, G. S.: Obst. & Gynec. **15**: 322, 1960.
5. Friesen, R. F.: Canad. M. A. **84**: 1247, 1961.
6. Irving, F. C. and Hurtig, A. T.: Sur. Gynec. & Obst. **64**: 178, 1937.
7. Kistner, R. W., Hurtig, A. T. and Reid, D. E.: Sur. Gynec. & Obst. **94**: 141, 1952.
8. Quinlivan, W. L.: J.A.M.A. **176**: 1035, 1961.
9. Rubenstone, A. I. and Lash, S. R.: Am. J. Obst. & Gynec. **87**: 198, 1963.
10. Sheldon, H. C., Kartis, A. and Louise, L. P.: Sur. Gynec. & Obst. **112**: 551, 1961.