

PLACENTA ACCRETA

Report on 2 Cases

by

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Although placenta accreta is one of the most serious complications of pregnancy and labour, yet it is conspicuous by its apparent rarity. It is said apparent, because it can not always be known how many of the mothers, particularly in rural obstetric practice, die of postpartum haemorrhage from this pathologically adherent placenta, either partial or complete. Uterine plug still saves certain percentage of mothers with postpartum haemorrhage from this complication, although simultaneously increasing the puerperal morbidity. The seriousness of the condition and danger to maternal life calls for prompt recognition and efficient management; but more can be achieved by prophylaxis and admitting those patients with history of previous postpartum haemorrhage and manual removal of placenta in hospitals or well-equipped institutions when they are in labour.

Case 1. M. X., Reg. No. C. S. S. 5739, Hindu, aged 32 years, sixth gravida, 38 weeks in pregnancy, was admitted in labour on 10th August at 10-20 P.M. Last men-

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struation started on 14th November 1957: expected date of confinement 21st August, 1958.

Past Obstetric History: para 5, all full-time and natural but there was history of manual removal of placenta on all occasions and during the last two labours blood transfusion was required for postpartum haemorrhage.

Present Obstetric History: Uncomplicated early pregnancy. Moderate labour pains started at 7 P.M. on 9th August.

General examination: Average build, moderately anaemic, no oedema. Blood pressure: 136/90 mm Hg. Pulse/respiration 80/18 per minute regular. Temperature — normal. Other systems normal.

Obstetric examination: Height of fundus about term size, vertex presenting in left occiput-anterior position; head fixed; foetal heart sounds 130 per minute, regular. Uterine contractions-sluggish, relaxation-good.

Pelvic examination: Outlet — relaxed, head — above the level of ischial spines; cervix — fully taken up, os two fingers loose, margins thin, soft and dilatable; membranes present with ill-formed bag, pelvis-adequate; show present.

Special examination-urine — albumin nil.

Progress: The patient continued with sluggish pains, foetal heart sounds — good, and the head engaged in next twelve hours. At 9 A.M. on 11th August, a second pelvic examination was done: cervix just three fingers, still soft, dilatable and thin. Head engaged, the lowest pole at level of the ischial spines; membranes present, bag ill-formed.

At 12 noon, syntocinon drip was started—one ampule in 540 cubic centimeter of 10 per cent glucose: 8 drops per minute to start with later 30 drops per minute. Uterine contractions did not increase to expectation and

at 7 P.M. the patient showed signs of exhaustion. Foetal heart sounds varied between 140 and 150 per minute but were regular. On pelvic examination cervix still three fingers dilated, membranes present, bag not well formed. Membranes were artificially ruptured and syntocinon drip was continued at the same rate.

At 10 P.M. the patient showed signs of distress and also foetal heart sounds became irregular. On pelvic examination the cervix was still three fingers and the lips were thick and rigid

As artificial rupture of membranes and syntocinon drip did not improve the condition and there appeared maternal and foetal distress and also that the patient was more than forty-eight hours in labour, a lower segment caesarean section was decided on.

The operation was performed at 10-45 P.M. and a male healthy baby was delivered at 11-8 P.M.; ergometrine 0.25 mgm. was injected intravenously during the process of delivery of the baby. The placenta was found to be morbidly adherent to the posterior wall of the body of uterus and was separated with difficulty. On exploration of the uterine cavity two circular areas on the placental site of uterine wall were found to be comparatively much thinner. The uterus did not contract at all and severe bleeding started. The uterine incision was quickly sutured and 0.25 mgm. of ergometrine was again pushed intravenously. The uterus was massaged under hot mops and kept pressed; blood transfusion was pushed on. Infusion of 10 per cent glucose solution was already being given. The uterus was still flabby and showed no signs of contraction and moderate vaginal bleeding still continued. As the patient's condition deteriorated further, a quick subtotal hysterectomy was performed. The blood pressure of the patient fell down to 60 mm. Hg. systolic and the diastolic pressure could not be recorded temporarily; the pulse became almost imperceptible. The condition improved gradually after two bottles of blood and the third bottle was started immediately. At 2 A.M. on the 12th, the blood pressure became 90/60 mm. Hg. and at 6 A.M. the same morning it was

raised to 100/70 mm. Hg. after the third bottle of blood was finished. There was no urine on catheterisation for 36 hours and at completion of 32 post-operative hours a blood biochemistry was done: urea, non-protein nitrogen and chloride were only slightly above normal. After completion of 36 hours, the patient passed 8 ounces of urine naturally and since then her urine output went up quickly.

There were no other postoperative complications and the patient was discharged in good condition on the 17th postoperative day with a healthy baby.

Specimen: On macroscopical examination the two circular areas on the posterior uterine wall were worth noting. On histological section of the thinned areas—penetration of the uterine musculature by placental villi with signs of hyaline degeneration could be seen.

See Fig. 1.

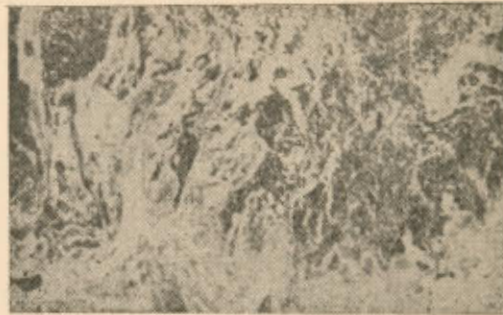


Fig. 1

Showing placental villi penetrating uterine musculature with hyaline degeneration.

Case 2. B. X., Reg. No. C.S.S. 1252, Hindu, aged 35 years, a 9th gravida, 39 weeks in pregnancy, was admitted with labour pains on 23rd February 1959 at 3-50 P.M.

Menstrual history: Nothing particular. Last menstrual period started on 30th May 1958; expected date of confinement—7th March 1959.

Obstetric history: Para 6 plus 2 abortions, all natural. There was history of retained placenta and manual removal at the fourth confinement. There were five living issues.

Past history: As already stated, there was

a history of retained placenta with manual removal on one occasion.

Family history: Nothing relevant.

Present obstetric history: 39th week of pregnancy; labour pains started on the day of admission at 12 noon. There was no history of complications during early weeks of pregnancy.

General examination: Fair build, anaemia and oedema nil; pulse 80 per minute, respiration 18 per minute, regular; temperature-normal. Blood pressure-120 m.m. of mercury heart and lungs-nothing abnormal detected; liver and spleen-not palpable.

Obstetric examination: Uterus term size; moderate, painful contractions present, relaxation-good, vertex presenting in left occipito-transverse position; foetal heart sounds good, 132 per minute, regular in left lower quadrant.

Pelvic examination: Outlet--normal, cervix-taken up, os-almost fully dilated. Membranes-absent. Vertex presenting with lowest pole of head below the level of ischial spines; pelvis-adequate.

The patient was confined naturally at 6 P.M. of a female living baby. There was slight perineal tear. Ergometrine 0.25 mg. injected intravenously just with the delivery of the baby. Patient was catheterized as usual. Placenta did not separate and at 6-30 P.M. the patient started severe haemorrhage spontaneously. Manual removal of placenta under general anaesthesia was tried but failed, due to firm attachment of the placenta on a fairly wide area near the fundus of the uterus. As the patient started bleeding severely a tight intrauterine packing was put in and the patient was transferred to operation theatre immediately. Plasma infusion started in one hand and 10 per cent glucose with pitocin drip in the other hand. Blood was sent for.

The patient was prepared in the usual way and quick abdominal sub-total hysterectomy was performed the same evening. Blood transfusion was started as soon as it was available. Penicillin and streptomycin were also started.

The patient made an uneventful recovery and was discharged in a healthy condition

with a healthy baby on 16th March 1959 i.e. on the 24th postoperative day.

Specimen: Macroscopically on opening the uterine cavity, the placenta was found to be firmly fused at the fundus, the musculature of which was infiltrated through and through and the placental tissue could be found as if up to beneath the serous coat. See Fig. 2.



Fig. 2

Placenta accreta of increta type firmly fused at uterine fundus.

On histological section, an increta type of placenta accreta with presence of placental villi deep into the muscle could be seen under the microscope. See Fig. 3.

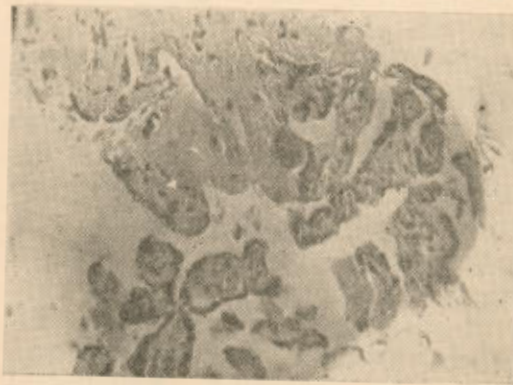


Fig. 3

Increta type placenta accreta with presence of villi deep in muscle.

Brief summary of the cases, discussion and conclusion:

The common features of the two cases were:

Both the cases were multiparae of over 30 years of age, both having sufficient number of living children and both giving history of retention of placenta and manual removal before. In one case the operation had to be performed in all the five previous deliveries and in the other only once. Both of them had no history of any complications during pregnancy, either early or late, and both of them got living babies on present occasion.

Other salient features were:

Case No. 1, presented all the features of prolonged labour due to uterine inertia which did not respond to syntocinon (a synthetic product allied in action to pitocin) and ultimately showed signs of maternal and foetal distress for which lower segment caesarean section had to be performed and the latter accidentally revealed placenta accreta of moderate degree. Placenta could be separated although with some difficulty and the site of placental attachment on uterine wall was palpably thinned out in two places on posterior wall of the body of the uterus. The uterus did not contract after placental detachment even with intravenous ergometrine injected twice and also hot wet-mop compress with sutured uterine incision and the patient got severe postpartum haemorrhage, for which a quick subtotal hysterectomy had to be performed. Histological section of uterine wall showed placenta accreta and some hyaline degeneration.

Case No. 2 had a natural delivery followed by retention of placenta. After the usual measures e.g. injection of ergometrine already given during the process of delivery of the child, catheterization of bladder, when no signs of descent of the placenta were found, a manual separation and removal under general anaesthesia was tried and during the latter process this severe degree of fusion between the placenta and uterine wall was detected although a partial separation was already done, and the patient started bleeding severely, so a temporary tight uterine plug was inserted, followed immediately by a subtotal abdominal hysterectomy.

Both macroscopically and microscopically the case proved to be one of increta type of placenta accreta.

Other measures of treatment were same, e.g. blood and fluid transfusion and antibiotics.

Case No. 1 gave symptoms of suppression of urine for about thirty-six hours but after that there were no postoperative complications. Both the cases were discharged in good condition after average duration of postoperative stay of about three weeks and with healthy babies.

The actual all round incidence of placenta accreta recorded during the particular year (1958-59) at Chittaranjan Seva Sadan College was 1 in 4,500 which apparently is less than that recorded by DeLee (1947) 1 in 2000 and the reason for that has already been explained. The incidence of placenta accreta amongst the retained placenta series was 1 in 300 and manual removal was done in more than 90 per cent of the cases

of retained placenta occurring in hospital and so incidence here is also comparatively less than that recorded by Miller (1959) amongst manual removal series i.e. 1 in 100.

In both the cases recorded there was previous history of retained placenta with manual removal on one or more occasions, so the incidence of previous manual removal stands in the present series to be 100 per cent which is higher than that recorded by Miller: 35 per cent.

Although both the cases recorded were multiparae with previous history of manual removal of placenta, it is not essential that this should be so as an etiological factor, because this pathological placental adherence or fusion can occur during the very first pregnancy and may be the cause for retention of placenta and manual removal. Here the etiology may be either deficiency of the decidua due to hormonal lack or abnormal action of the placental villi as suggested by Schumann (1933). In none of the two cases, was there any symptom or sign of placenta praevia with placenta accreta.

Case No. 1 corresponded to first degree (placenta accreta) and Case No. 2 to second degree (placenta increta) of Kaltreider's (1945) classification of placenta accreta. Macroscopically the second case looked, at certain areas, like the third degree (placenta percreta) although microscopically it was proved to belong to the second degree.

Although the diagnosis of case No. 1 was fortuitous, the clinical manifestations are almost always common and they are non-separation or partial separation of placenta and its reten-

tion which is usually followed by severe postpartum haemorrhage although in complete accreta there may not be any symptom but non-separation and retention unless induced mechanically by trying to separate by the attending midwife or obstetrician.

Reports of spontaneous rupture of gravid uterus due to placenta accreta have been published. Golden and Betson (1959) reported two cases.

Prognostically it is found from the two cases recorded and also from previous records that foetal prognosis is uniformly good. As for the maternal prognosis, it is found from the present cases that if early and efficient treatment can be given by performing abdominal hysterectomy with necessary transfusions and antibiotic administration, probably all the mothers can be saved. On the contrary if not properly and timely tackled, majority of the mothers will be lost from serious postpartum haemorrhage and shock and the remaining group will suffer from puerperal morbidity due to effect of haemorrhage, shock and infection. The cause for suppression of urine in case No. 1, can probably be explained by the effect of oligoemic shock with loss of diastolic pressure.

During treatment, as already said, quick subtotal abdominal hysterectomy, as soon as the condition is diagnosed, will probably give the best results, although there is a small place for packing in partial accreta or leaving it, as it is in complete accreta if not already disturbed, particularly in cases of primiparae or multiparae with no living issue. In those cases revealed accidentally during caesare-

an section, the same principle will stand except that, as preferred by a few, uterine cavity can be packed and one end of the roller gauze can be passed through the cervix into the vagina to be taken out later, and the uterine wound sutured with the pack inside.

In conclusion, it can be said that placenta accreta, although a rare pathological condition of pregnancy and labour, is one of the most serious conditions to be kept in mind by the obstetricians and should be diagnosed and treated most efficiently at the earliest moment if most of the victim mothers are to be salvaged and it is a fact that they really can be saved. Abdominal hysterectomy, probably a quick subtotal one, is, in the author's opinion, the best and the safest treatment once the diagnosis has been confirmed, keeping a small place open in mind for the conservative treatment for only primipara.

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References

1. Delee, J. B.: *Principals and Practice of Obstetrics*, Philadelphia and London, 1947, Saunders, p. 708.
2. Golden, M. L. and Betson, J. R.: *Am. J. Obst. Gynec.* 78: 890, 1959.
3. Kaltrieder, D. F.: *Bull. School Med. Univer. Maryland*, 31: 1, 1945.
4. Millar, W. G.: *J. Obst. Gynec. Brit. Emp.* 66: 353, 1959.
5. Schumann, E. A.: *Obstetrics and Gynaecology*, Edited by A. H. Gurtis, Philadelphia, 1933, Saunders.