

PLACENTÁ ACCRETA

BY

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Haemorrhage associated with pregnancy is still responsible for many maternal deaths and placenta accreta is an uncommon cause. It carries a very high mortality and calls for accurate, quick diagnosis and proper management.

In the past few years very few cases of placenta accreta have been reported. We believe, therefore, that a presentation of a case with a resume of aetiology, pathology and management is both appropriate and contributory to the knowledge of this important, rare and serious cause of haemorrhage.

Case Report

R., age 35, gravida 5, admitted on 5th January 1955 at 4-30 p.m. with history of labour pains for 24 hours.

Previous Obstetric History

She had 4 deliveries, 2 of which were abnormal as follows: 1 and 2 F.T.N.D., living 18 and 13 years respectively.

For her third pregnancy the patient was admitted at the 35th week on 21-4-47 in this hospital with the history of ante-partum haemorrhage.

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Foetal heart was not heard on admission. A classical caesarean section was done for a central placenta praevia. The placenta separated easily and the uterus contracted well.

Puerperium: She had mild pyrexia for ten days which was controlled by penicillin. The wound healed by first intention and she was discharged on the 23rd day.

Patient conceived again in 1950. She did not attend any ante-natal clinic. The labour pains started and when she did not deliver in 24 hours, she decided to come to the hospital; she delivered in the bandi on her way to the hospital. She had profuse post-partum haemorrhage. Patient went into a state of shock and the relatives, thinking that she was going to die soon, took her home. Her condition slowly improved. Ten days later, she was brought to the hospital with severe sepsis. She responded well to penicillin and sulphonilamide and was discharged on the 8th day.

Present Pregnancy

Her health during the present pregnancy was good. She did not attend the ante-natal clinic. Labour pains started 24 hours before admission. There was no history of rupture of membranes.

Condition on Admission

She was a fairly well-nourished woman of 35, not anaemic; urine normal. Blood pressure 110-80. The uterus was at term with breech presentation and presenting part high; uterine contractions present, occurring every 15 minutes and lasting for half a minute. The contractions were poor. F.H. 140 p.m. good. Maternal pulse 84; good. Temperature normal.

Vaginal Examination

Cervix 2 5 dilated. Cervical canal partly taken up. Cervix soft and dilatable. Breech not engaged; membranes present. Pelvis roomy.

Because the pelvis was roomy and the foetus was of average size, it was decided to allow her to have a vaginal delivery. She was kept under close observation to watch the progress of labour. Pethidine 100 mg. was given. 6-1-55: Patient slept well till 5-30 a.m. the next day. Uterine contractions started. Membranes ruptured spontaneously at 6-15 a.m. and at 6-35 a.m.; spontaneous delivery of the breech; child cried lustily and weighed six pounds. At 7-00 a.m.—The placenta was not separated and there was no bleeding. At 7-15 a.m.—slight bleeding started. Crede's expression tried once, but failed.

Under general anaesthesia manual removal was tried. It was found that the placenta was adherent and separation was not possible; patient bled profusely. Further attempts at removal were abandoned. The uterus was tightly packed. Meanwhile blood transfusion was started. Patient went into a state of shock. She

was treated by morphia, oxygen and further blood. No further bleeding took place. At 2-00 p.m. (that is 6 hours later) patient recovered completely from shock.

She had had 4 pints of blood so far. B.P. was 100/70. Pulse 100 and good volume.

The problem before us now was: What was the best procedure to be adopted? Should we do a hysterectomy straightaway or should we attempt manual removal once more? If we attempted manual removal again, would it be successful? This was sure to cause bleeding and shock again. After a great deal of thought, finally we decided to open the abdomen and then to ask one of the senior members of the staff to try manual removal from below. If successful and if bleeding controlled, to close the abdomen. If separation of placenta not possible or if separation possible and bleeding not controlled, then to do a hysterectomy. We would then not have sacrificed the uterus needlessly.

So the abdomen was opened under gas and oxygen. It was found that the left cornu was much distended and very thin. Manual removal of the placenta was tried by an assistant from below. Separation of the placenta was not possible and this caused certain amount of bleeding. A subtotal hysterectomy was done and the abdomen was closed in layers. The condition of the patient remained good throughout the operation. She had in all 7 pints of blood.

Post-operative Period

Her convalescence was normal except for mild pyrexia for 6 days,

which responded to penicillin and sulphonilamide. The stitches were removed on the 8th day. The wound healed by first intention and she was discharged on the 19th day.

Cut section of the uterus showed presence of part of the placenta densely adherent to the left cornu, fundus and part of the anterior and posterior walls. No demarcation could be seen between the placenta and the uterine wall. The placental tissue appeared to be penetrating deeply into the musculature. In certain parts, the uterine wall was extremely thin. The rest of the uterus looked normal.

Pathological Report

Macroscopic: Weight 670 g. A lot of blood in the uterine cavity. The placenta is firmly adherent at 3 or 4 places. The uterine musculature is markedly thinned out near the fundus on the posterior aspect ($\frac{1}{2}$ cm. thick).

Microscopic: Shows chorionic villi and decidual cells with blood clots. The uterine muscle is markedly thinned out and the villi are seen infiltrating the muscular layer consistent with placenta accreta.

Discussion: Placenta accreta is one of the rare conditions of which some obstetricians of long experience have never seen a case. When we realise that it carries a very high mortality, i.e. 37-67%, one must accept it as a dangerous complication.

Definitions

1. 'Placenta accreta' is a term used where there is no line of demarcation between the placenta and the uterine wall. Normally, the separation takes place through the spongy layer. Here the decidua basalis is absent.

2. 'Placenta increta' where the villi penetrate deep into the muscle.

3. 'Placenta percreta' where the villi penetrate the peritoneal covering of the uterus.

These conditions may be partial or complete.

History

The first reported case was by Plater in the year 88 A.D. It was a case of retained placenta and the patient died. Post-mortem examination revealed an adherent placenta.

The first patient to recover was reported by Alexandroff in 1900. It was a case of placenta percreta and spontaneous rupture of the uterus occurred. An immediate hysterectomy was done.

Pathology

Examination of the specimens reveals intimate fusion of the placenta with the uterine wall. In some, the villi penetrate deep into the uterine musculature as in this case. When manual removal is tried in such cases, one may find bits of muscle attached to the placenta.

Microscopically there is absence of decidua basalis, and villi attach themselves directly to the uterine wall. It is inevitable in such cases that separation of the placenta becomes difficult or almost impossible. If force is used, it will end in perforation of the uterus.

Incidence

In Boston Lying-in-Hospital it occurred once in 1,956 deliveries. Nathanson found an incidence of 1 in 20,000 deliveries.

Aetiology

1. The disease is primarily one of

multiparity. Among 18 cases reported by Irving and Hertog, all were multiparae except one.

2. *Endometrial Trauma.* There is universal agreement about the importance of endometrial trauma in these cases; caesarean scars, vigorous curettage, hysterotomy, manual removal of placenta, irradiation, application of caustics to the uterus.

3. *Puerperal Infections.* These undoubtedly play an important part.

4. *Cornual Implantations.* The normal situation of the placenta is on the anterior or posterior walls and in about 5% in the cornua, the right cornual implantation being commoner than the left. Normally, therefore, placenta is situated where the uterine muscle can act to separate it with mechanical advantage. In the series presented by Bryan Williams, cornual implantation was found in nearly half the series of cases of placenta accreta. It seems as if the cornual region is unfit for placental attachment both from the structural and functional point of view.

5. *Uterine Malformations.* The high incidence of uterine malformations in these cases has been noted by Williams and others. Williams' series also suggest that cornual implantation is usually secondary to uterine malformation. These findings show that a defect in the fusion of mullerian ducts may give rise to structural and functional abnormality which will show itself for the first time in the third stage of labour and be a chief factor in causing adherent placenta. Way and Hunter stress the importance of uterine malformations evident only in the pregnant uterus. Taylor found that among 271 cases of malformation, 98% were obstetrical

ones. A deformity which might pass unnoticed in a non-pregnant woman might become a major one in pregnancy and labour. It seems therefore that pregnancy calls attention to the great majority of them.

6. Placenta accreta is often associated with some abnormalities of the placenta such as placenta praevia, placenta succenturiata and placenta membranacea.

7. Abdominal pain during pregnancy: Potter and Davidson report cases who had abdominal pain of varying severity during pregnancy. The theory is put forward that fibrosis following haemorrhage with threatened miscarriage may play a part in the placenta accreta.

Among the various aetiological factors, one could say that one of the important causes of abnormally adherent placenta is some kind of uterine malformation with cornual implantation.

Management

In the past, manual removal of placenta was looked upon as a serious procedure attended with high mortality. These days it has become much safer, partly because of blood transfusion and antibiotics, and partly because the operation is done at an earlier stage.

What should be the limit to the length of the normal third stage? Sheehan has shown the danger of any third stage prolonged over 2 hours, and found no deaths from shock or haemorrhage when it lasted less than an hour.

If the time limit for the normal third stage is set arbitrarily at one hour, then most cases of haemorrhage and shock could be avoided.

Scrupulous aseptic and antiseptic precautions should be taken. Needless to say that blood transfusion should be started at the beginning of the operation. In some, separation of the placenta is easy. But in cases of placenta accreta and increta, separation is not possible and attempts at separation result in profuse bleeding and, if force is used, even perforation of the uterus.

It would appear that the best and safest procedure when such a condition is encountered is to desist from further attempts at removal from below (danger of haemorrhage, shock and perforation) and to perform hysterectomy. Cunningham reported 2 cases in which the uterus was perforated in attempts at removal. Immediate hysterectomy was done with recovery. Irving and Hertog report good results by hysterectomy as compared with manual removal of the placenta.

While the majority agree that the best treatment is hysterectomy there are a few who have adopted conservative treatment similar to the method of dealing with the placenta in abdominal pregnancy. The placenta is left in situ, the cord is cut short, and the uterus is packed for 24 hours. The placenta is left to be absorbed or sloughed off.

Schumann reports 14 cases which were treated conservatively. His indication for conservative treatment is absence of bleeding. All his cases recovered although a stormy convalescence was noted. Two of his cases had normal pregnancies following his method.

Gemmell records a case where caesarean section was done for pla-

centa praevia. The foetus had been dead for 4 weeks. The placenta which was "reduced to a thin, mummified, parchment-like structure" was densely adherent and separation was not possible. Attempts at separation resulted in removal of bits only. The cord was cut short and the uterus was 'marsupialized' by stitching its edges to the rectus sheath. The uterine cavity was packed with acriflavine gauze. She had a febrile convalescence. No lochia appeared and no material recognizable as placenta was passed through the abdominal wound or from the vagina. She was discharged 10 weeks later and wound had not healed then. Three months later, wound had healed. She was fit and well and had 3 normal periods. Two years later, she had another pregnancy and delivered by caesarean section. Live child weighing 5 lbs. 3 ounces. Convalescence was normal and she was discharged on the 24th day.

It is questionable whether a "live" placenta could be safely left inside with all the dangers of haemorrhage, sepsis and prolonged ill-health as a result of it.

In conclusion, we could say that the best and the safest treatment in these cases is hysterectomy, the exceptional case being, if the patient is young and if she is anxious at all costs to have her uterus preserved, then the risk might be justified.

Our experience in this case also tells us that when manual removal has failed at the first attempt, to do hysterectomy as soon as the patient's condition permits without further attempts from below.

Summary

1. A case of placenta accreta is reported.

2. A brief resume of the etiology, pathology and management of such cases is presented.

3. The suggestion is made that hysterectomy is the choice of treatment in these cases.

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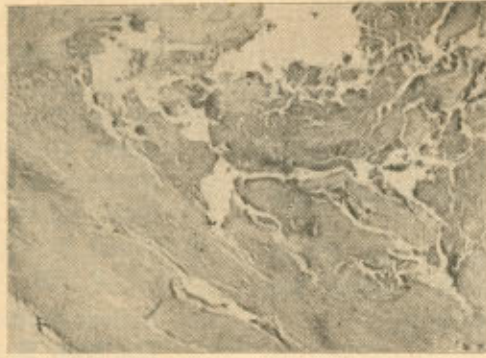


Fig. 1
Shows the thickness of the uterine wall with
no normal muscle tissue.



Fig. 2
This figure showing the normal muscle wall of
the uterus from other area for comparison.

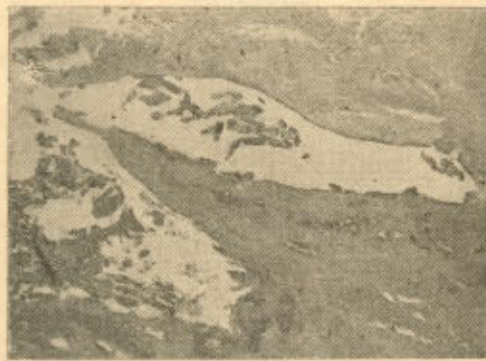


Fig. 3
This figure shows the chorionic villi infiltrating
the uterine wall,