PLACENTA ACCRETA

S Y Chew

SYNOPSIS

An 8 year review (from 1971-78) of the incidence and management of PLACENTA ACCRETA at the Kandang Kerbau Hospital, Singapore, is presented.
15 cases of placenta accreta were recorded out of 207,906 deliveries from 1971 to 1978. The incidence is thus 1 in 13,860 deliveries. All 15 cases were treated by abdominal hysterectomy and diagnosis confirmed by histopathology. There was one maternal death. The overall perinatal loss was 36%.

INTRODUCTION

Placenta accreta is an abnormal condition in which the placental villi attach directly to the myometrium, in the absence of an intervening decidua.

Depending on the degree of infiltration of the uterus, placenta accreta can be divided into—

a) placenta accreta (as defined above)
b) placenta increta where the chorionic villi invade the myometrium,
c) placenta percreta where the chorionic villi penetrate the entire thickness of the uterine wall to the serosal surface.

MATERIAL AND METHOD

15 cases of placenta accreta were recorded at the Kandang Kerbau Hospital, Singapore from 1971 to 1978. In all 15 cases, the placenta was very adherent and could not be removed completely, this led to intractable haemorrhage which required an emergency hysterectomy. The diagnosis of accreta/increta/percreta was confirmed by histopathology. The clinical presentations and management of these patients were analysed.

RESULTS

Incidence

There were 207,906 deliveries at the Kandang Kerbau Hospital from 1971 to 1978. The incidence is thus one in 13,860 deliveries.

Various figures were quoted in the literature (Table I) from one in 1,667 to one in 54,000 deliveries.

Department of Obstetrics & Gynaecology
"A" Unit
Kandang Kerbau Hospital
Hampshire Road
Singapore 0821

S Y Chew, MBBS (H.K.), MRCOG, AM,
Senior Registrar.

TABLE 1
INCIDENCE OF PLACENTA ACCRETA? INCRETA & PERCRETA.

Author	Date	Incidence
Hauptman & Waters	1960	1 : 54,000
Maqueo-Topete	1968	1 : 2,915
Ochshorn.	1968	1 : 1667
Weekes & Greig	1972	1 : 14,193
Present series	1979	1 : 13,860

TABLE II
COMPARATIVE INCIDENCE OF ACCRETA INCRETA AND PERCRETA

Author	No. of cases	Accreta	Increta	Percreta
Breen 1977	40	77.5%	17.5%	5%
Wynn 1978	40	78%	17%	5%
Present series 1979	15	66.6%	20%	13.4%.

The majority (73.3%) of the patients were between 31 to 35 years old. (Table III).

TABLE III
AGE INCIDENCE OF PLACENTA ACCRETA

Age of patient	No. of cases
26 — 30	2
31 — 35	11
36 — 40	1
over 40	1

CLINICAL PRESENTATION

Out of 15 cases, 13 gave a history of antepartum bleeding, varying from 12 to 38 weeks gestation. Bleeding was at times scanty consisting of vaginal 'spotting' or at times, heavier flow which required the use of sanitary pads. In most cases, the bleeding was recurrent.

2 cases were silent and only bled when in labour.

None gave a history of severe abdominal cramps as described by McKeogh and D'Errico (1955).

Diagnosis of placenta accreta is made on the failure to find a line of cleavage between the placenta and the uterine wall on intra uterine manual examination.

Placenta accreta can be divided into 2 groups.

(a) Those associated with placenta praevia.
(b) Those without placenta praevia.

(a) Those with placenta praevia. (Table IV).

There were 11 cases associated with placenta praevia. Out of these, 3 had a history of previous Lower segment Caesarean section (LSCS).

7 cases had previous dilation and curretage (D&C) done for incomplete abortion including one molar pregnancy. 2 cases had manual removal of placenta in previous deliveries, one had manual removal for a partial placenta accreta and conservation of the uterus was successful, one had history of manual removal of placenta thrice in her obstetric career, the last 2 incidents because of partial accreta.

(b) Those without placenta praevia.

There were 4 cases. 2 had history of previous LSCS. The site of the accreta was not at the lower uterine segment. One patient had previous D&C for incomplete abortion, and she had placenta perforating through the right cornu of the uterus. One patient had a multilobulated fibroid projecting from the right posterior-lateral wall of the uterus and was removed at the time of previous LSCS. In this subsequent pregnancy there was placenta increta.

TABLE IV
COMPARISON OF PLACENTA ACCRETA WITH PRAEVIA TO THOSE WITHOUT PRAEVIA

	Placenta accreta with praevia	Placenta accreta without praevia
No. of cases	11	4
Maternal mortality	1	0
Foetal loss	4(36%)	0
History of trauma		
a) Previous LSCS	3	2
b) Previous D & C	7	1
c) Previous manual removal of placenta (MRP) one had MRP once with partial accreta another had MRP thrice, the last 2 occasions with accreta	2	0
Previous molar pregnancy	1	0
Operation done	11 THBSO	3TH 1 subtotal hysterectomy

THBSO = Total hysterectomy and bilateral salpingo-oophorectomy
TH = Total hysterectomy

MANAGEMENT

(a) Placenta parevia accreta

In the 11 cases with associated placenta praevia an examination under anaesthesia was first carried out. When placenta praevia was confirmed a lower segment Caesarean section was done in 10 cases and a classical Caesarean section was done in the eleventh case.

Placenta accreta was diagnosed when no plane of cleavage between the placenta and the lower uterine segment was found on attempting to remove the placenta. This resulted in piecemeal removal of placenta followed by intractable bleeding. As a result, an abdominal hysterectomy was performed.

(b) Placenta accreta without praevia.

In the remaining 4 cases where there was placenta accreta without any placenta praevia, LSCS was done for the following indications.

i) 2 previous LSCS for cephalo-pelvic disproportion
ii) 1 failed induction of labour for pre-eclampsia
ii) 1 abruptio placenta
iv) 1 previous LSCS for elderly primigravida with fibroids and previous myomectomy.

In 3 cases intractable bleeding from the placenta bed led to an abdominal hysterectomy. In the fourth case, it was at first decided to conserve the uterus; persistent haemorrhage led to a re-laparotomy and hysterectomy later in the day.

OPERATIVE RESULTS

(a) Maternal mortality.

There was one death (6.7%). The patient had a classical Caesarean section done for placenta praevia accreta. Profuse bleeding at the time of Caesarean section resulted in cardiac arrest on the operating table. However, resuscitation was successful and bilateral internal iliac arteries were ligated. The next day there was further bleeding, so another laparotomy and abdominal hysterectomy was done. She died on the fourth day from haemolytic uraemic syndrome.

(b) Morbidity

i) Cardiac arrest

2 cases had cardiac arrest on the table one was the case described above. The other held the record of having cardiac areest twice during the process of hysterectomy but miraculously survived.

ii) Bladder injury

3 cases had inadvertent damage to the bladder but was recognized at the time of operation and repaired.

iii) Urinary tract infection. 3 cases had urinary tract infection

iv) wound infection

2 cases had wound breakdown. No secondary suture was required.

v) Re-laparotomy

2 cases required a second laparotomy. In one case the attempt to conserve the uterus by ligating the internal iliac arteries failed, so a hysterectomy was done the following day.

In the second case a hysterectomy had already been done. At a re-laparotomy for persistent bleeding the haemorrhage was found at the bladder base, peri-vesical space and at the vaginal vault.

vi) Incisional hernia

One case had an incisional hernia but was otherwise well.

FOLLOW UP

Of the 14 cases that survived the operation, 13 are well. The last one could not be traced, in spite of all the efforts of our medical social worker. She was discharged alive and well from the hospital on the tenth operative day. She never returned for post-operative follow up care.

TABLE V
OPERATIVE MORBIDITY AND MORTALITY

Cardiac arrest	2
Bladder injury	3
Urinary tract infection	3
Wound infection	2
Re-laparotomy	2
Incisional hernia	1
Maternal death	1

DISCUSSION

Placenta accreta is a relatively rare obstetric condition, the incidence in this series is one in 13,860 deliveries over an 8-year period (1971-78).

Variable data regarding the incidence was obtained from literature (Table 1).

In this series, all 15 cases had no history of severe abdominal cramps antenatally (McKeogh & D'Errico 1951).

The adherent placenta should not be confused with placenta accreta. In the former there is a failure in the mechanism of separation. It is therefore possible to separate the placenta from the uterine wall manually.

In placenta accreta it is impossible to separate the placenta from the uterine wall completely.

The association of a previous LSCS with placenta accreta and placenta praevia (ie. over the lower uterine segment scar) was seen in only three cases (27.3%) Wynn (1978) showed that out of 30 cases, two-thirds had previous LSCS.

Of the 4 cases without placenta praevia 1 case had a history of previous D & C and the placenta percreta was situated at the right cornu. There is a possibility that previous perforation of the uterus at the time of D&C gave rise to accreta in the subsequent pregnancy. With the liberalistion of abortion laws this may be of significance in the future. The number of legalised abortions in the hospital has doubled since then.

3 cases with a previous history of manual removal of placenta accreta and managed conservatively with success, lost the uterus in the subsequent pregnancy. In one case, partial placenta accreta occured once and then she lost her uterus in a subsequent pregnancy. In another woman, she had 3 episodes of manual removal of placenta, the last two instances were associated with partial placenta accreta.

Most people would agree that the best treatment for placental accreta is an abdominal hysterectomy because this results in the lowest maternal mortality. In this series, a total abdominal hysterectomy was performed in 14 cases and a subtotal hysterectomy in one. Where possible a subt-total hysterectomy should be avoided. If the cervix is left behind bleeding can continue from the cervical stump. Also it serves as a potential site for cancer.

There are 2 cases in this series where attempt to conserve the uterus led to a re-laparotomy and one maternal death.

There is however a place for attempting conservative management for those who have as yet to complete their families. Various methods have been suggested:

a) Internal iliac artery ligation (Reich & Nechtow 1962) O'leary & O'leary 1966)

In this series only one case had internal iliac artery ligation done. Unfortunately she bled the next day and a re-laparotomy and THBSO done. But she died 4 days later of haemolytic uraemic syndrome.

b) Haemostatic sutures where the bleeding is from a localized site (Miller 1961).

c) Removal of adherent placenta may be followed by slight bleeding which can be controlled by uterine packing (Torbet & T. soutsoplides 1968).

CONCLUSION

Placenta accreta is a relatively rare obstetric condition. Prompt treatment with an abdominal hysterectomy gives the lowest maternal mortality. There is however a limited place for conservative treatment.

When placenta accreta is associated with placenta praevia, there is a perinatal loss of 36%.

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