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CASE REPORT

Joseph Mechery · David Burch

Alternative management of placenta accreta

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Abstract A 27-year-old lady presented at 32 weeks gestation complaining of shortness of breath, headache, palpitations and feeling generally unwell for 1 day. Her current pregnancy was complicated by major placenta praevia. Because she developed worsening symptoms of pre-eclampsia and raised blood pressure, a decision was made to deliver her by an elective Caesarean section. The Caesarean section was complicated by a morbidly adherent placenta. There was no plane of cleavage between the placenta and the uterine wall. She had severe haemorrhages of 2.5 l following delivery, and to stem the bleeding, a B-lynch suture was placed and a Rusch tamponade balloon was inserted to achieve haemostasis. Although her condition improved and she did not have any further bleeding, she developed infection 3 weeks later and had a hysterectomy. We present this case to demonstrate that balloon tamponade and B-lynch suture are valuable developments in management of obstetric haemorrhage due to placenta accreta.

Keywords Placenta accreta · Conservative management

Introduction

Placenta accreta is a rare event in pregnancy and may cause life threatening haemorrhage. Control of bleeding is the goal of management of placenta accreta, which usually necessitates hysterectomy. However, conservative treatment of placenta accreta has been done in certain clinical situations when preservation of the uterus and further childbearing is desired.

J. Mechery (✉) · D. Burch
Department of Obstetrics and Gynaecology,
Royal Lancaster Infirmary,
Lancaster, LA1 4RP, UK
e-mail: Joseph.Mechery@mbht.nhs.uk
Tel.: +44-1524-583828
Fax: +44-1524-583585

Case report

A 27-year-old lady presented at 32 weeks gestation complaining of shortness of breath, headache, palpitations and feeling generally unwell for 1 day.

She had had one previous vaginal delivery which was complicated by severe post-partum haemorrhage and retained placenta, for which she had manual removal of placenta. She had 8 units of blood and was admitted to the ITU. The current pregnancy was complicated by major placenta praevia.

On examination, her pulse was 80/min, blood pressure 158/98 mmHg, temperature 37.3, respiratory rate 18/min and oxygen saturation was 99%. The uterine size was compatible with 32 weeks gestation. The fetus was in longitudinal lie with a cephalic presentation. There was no uterine activity. Her respiratory and cardiovascular systems were normal and reflexes were brisk with no clonus. Her cardiotocograph was normal.

Next day, she developed oliguria and abnormal renal function. Her urea was 7.4, creatinine 84, urates 427 and sodium was 129. Her urine showed 4+ of protein and 24-h urine protein was 9.3 g. Her urine microscopy showed scanty white cells, few epithelial cells but no casts.

Her condition deteriorated and she developed worsening symptoms of pre-eclampsia and raised blood pressure, and a decision was made to deliver her by an elective Caesarean section.

The Caesarean section was complicated by a morbidly adherent placenta. There was no plane of cleavage between the placenta and the uterine wall. She had severe haemorrhage of 2.5 l following delivery, hence to stem the bleeding a B-lynch suture was placed and a Rusch tamponade balloon was inserted. Haemostasis was achieved. She had blood transfusion, oxytocics, antibiotics and thromboprophylaxis, and was transferred to ITU for intensive monitoring. The balloon was deflated after 24 h gradually at 20 ml/h. Subsequently her condition improved and she was transferred back to the ward. Her blood parameters continued to improve and she was discharged on post-operative day 7. She received antibiotics for 2 weeks and was fol-

lowed up with weekly beta-hCG. Although she did not have any further bleeding, she developed an infection after 3 weeks. As she did not respond to intravenous antibiotics, hysterectomy was performed.

Discussion

Placenta accreta has been estimated to complicate approximately 1 in 2500 deliveries, resulting in significant morbidity and mortality [12]. Over the last 50 years, the incidence of placenta accreta is estimated to have increased 10-fold [1].

Control of bleeding is the goal of management for placenta accreta, which usually necessitates hysterectomy [10].

Conservative treatment is preferred in certain clinical situations where preservation of the uterus and further childbearing are desired. The association between placenta accreta, placenta praevia and Caesarean section has become more striking in recent years [9]. Other associations include previous uterine surgery and raised maternal serum alpha-fetoprotein in the second trimester.

Ultrasound may offer additional information in ascertaining the probability of placenta accreta. Colour Doppler has shown improved diagnostic accuracy, and should be considered if there is a high index of suspicion [11]. Recent reports have shown superior accuracy in diagnosis of placenta accreta with magnetic resonance imaging, but its sensitivity and specificity is yet to be established [13].

The mainstay of traditional management is abdominal hysterectomy. This option, however, ends fertility and may cause devastating psychological consequences.

In order to avoid hysterectomy and preserve fertility, conservative management techniques may be appropriate as long as they control the bleeding. These include leaving the placenta undisturbed [6], treatment with methotrexate [3] and attempting interval removal [4].

In our patient, there was a high index of suspicion of placenta accreta. We could not remove the placenta and no cleavage plane was found, hence no further attempts were made to remove the placenta. A B-lynch suture was placed to prevent uterine relaxation due to the retained placenta, while the tamponade balloon was used to control bleeding from the lower segment. The umbilical cord was cut short and the placenta left in situ and the uterus closed as normal. She was given prophylactic antibiotics and oxytocin to decrease the risk of bleeding and infection.

We did not consider the other option of giving methotrexate when the placenta is retained to hasten the resolution of the placenta, because a recent review stated that resolution is usually complete in 3–4 months time regardless of methotrexate use [2]. The option of interval removal of placenta was not attempted, as this not only can be associated with heavy bleeding but also does not guarantee success [8].

Once the placenta is left in situ, women should be followed up to ensure complete resolution. Our patient was followed up by a combination of clinical assessment, ultrasound examination and serum beta-hCG assay. Although reduction of beta-hCG correlates with the reduction of the placental volume, uterine haemorrhage can still occur even at low levels [5, 7]. Similarly, ultrasound also helps to determine placental resolution.

The tamponade balloon and B-lynch suture are valuable developments in management of obstetric haemorrhage, but as this case demonstrates, there is sometimes no alternative to hysterectomy.

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