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Surgical Management Of An Undiagnosed Placenta Increta In The Previable Gestation

A Case Report and Literature Review

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Background

Placenta accreta spectrum encompasses the range of pathological adherence of the placenta to the uterus. The management can vary greatly and requires individualised consideration.

Aim

To present a case of undiagnosed placenta increta at 19-weeks gestation and review the diagnosis and management.

Case Description

A 44-year-old presented at 16+3 weeks gestation with vaginal bleeding, on a background of a previous Caesarean section. Ultrasound showed a shortened cervix and placenta covering the internal os, extending onto the anterior and posterior wall. Due to significant haemorrhage and suspicion of placenta accreta, she was admitted for monitoring.

At 19+2 weeks, she developed sudden onset bleeding, abdominal pain, and pre-term rupture of membranes, prompting transfer to a tertiary hospital with a Level 5 neonatal intensive care unit. On arrival, she was haemodynamically unstable with persistent hypotension, haemorrhage and pain, and subsequently counselled and consented for surgical management.

Under general anaesthetic, a laparotomy and hysterotomy was performed, where the fetus was delivered with no signs of life and placental abruption was identified. There was evidence of placenta accreta with placental tissue and bladder adherent to an abnormal lower segment. The decision was made to perform a subtotal hysterectomy. She recovered well post-operatively and was discharged after 7 days. Histopathology of the uterus was consistent with placenta increta.

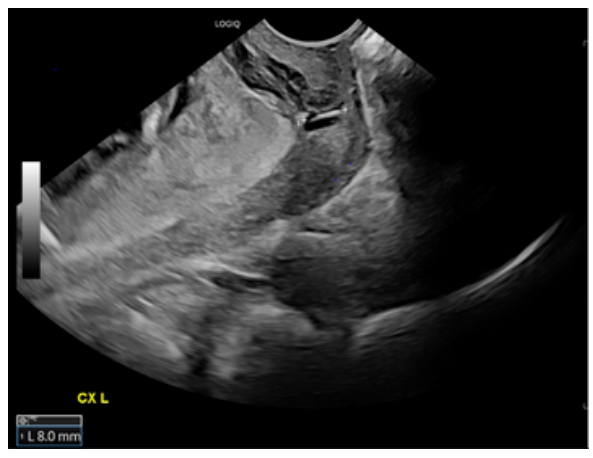

Figure 1 - Ultrasound at 16+3 demonstrating a shortened cervix and placenta covering the internal os

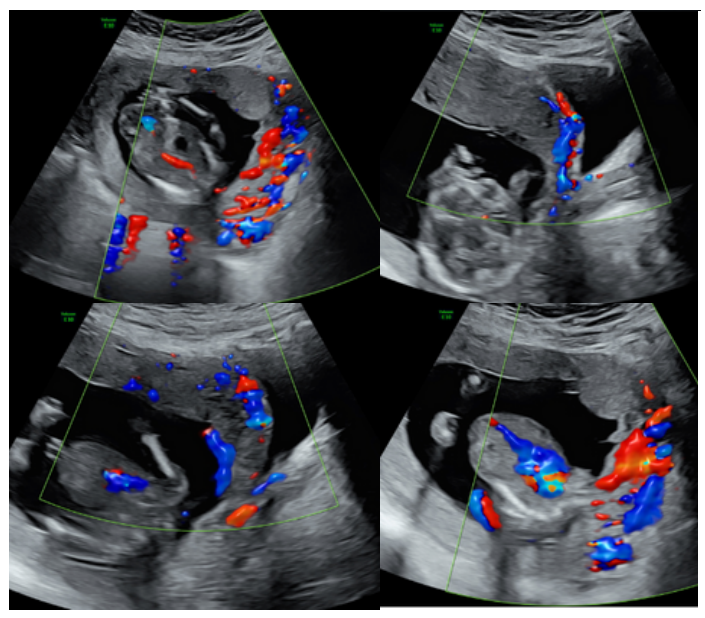

Figure 2 - Ultrasound at 15+5 showing anterior low lying placenta with lacunae and placental bed hypervascularity near the bladder

Discussion

Placenta increta refers to the subtotal invasion of the placenta into the myometrium. The incidence is increasing, largely in part due to the increased rates of caesarean delivery. This remains the main risk factor for placenta accreta spectrum along with placenta praevia which is present in 90% of cases.[1] Other risk factors include increasing maternal age and parity, uterine artery embolisation, and previous uterine surgeries.[2] It can cause life-threatening haemorrhage and therefore prenatal diagnosis is crucial to ensuring pre-operative multi-disciplinary management.

Gold standard diagnosis of placenta increta remains histopathology of the placenta and uterus showing abnormal invasion of the myometrium. Prenatal diagnosis is made via ultrasound which can be done as early as the first trimester. Ultrasound has a higher sensitivity of 93% for diagnosing placenta increta, compared to 90% and 81% for placenta acreta and percreta respectively.[3] Ultrasound markers predictive of placenta accreta spectrum include multiple lacunae, hypervascularity, and abnormal uteroplacental interface. MRI can be used as an adjunct to assess depth and topography of placental invasion. Clinical diagnosis of PAS at time of delivery can be made with abnormally adherent or invasive placenta.[4]

The management of placenta increta is widely accepted to be via caesarean hysterectomy. This is often as a planned preterm caesarean hysterectomy with the placenta left in situ.[5] Antepartum haemorrhage is the main risk factor for earlier emergency delivery.[6] Conservative management for uterine preservation has been attempted in an increasing number of cases of placenta accreta spectrum with varying reported outcomes. Some small scale studies have demonstrated similar[7], and even improved outcomes[8] with conservative treatment however lack of histological confirmation of PAS limits the validity of this data.[1] There is insufficient research comparing definitive versus conservative management and thus caesarean hysterectomy remains the recommended management.

Conclusion

Timely diagnosis and a multi-disciplinary management of placenta accreta spectrum is required to ensure safe patient outcomes. The recommended timing and mode of delivery varies greatly. Although conservative management for uterine preservation can be considered, when complications of significant active bleeding and instability occur, urgent delivery via Caesarean hysterectomy is recommended.

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