

A Jehovah's Witness with Placenta Accreta

*Ben Goodman, Adam Shonfeld
Department of Anaesthesia,
St George's Hospital NHS Trust, London, UK*

Introduction

We present the case of a 32-year-old Jehovah's Witness whose second pregnancy was complicated by an abnormally invasive placenta.

Her first child was delivered by classical caesarean section due to a large cervical fibroid. A subsequent open myomectomy was performed through the same midline scar, then in her second pregnancy she developed anterior placenta praevia with focal accreta. The following case details the multidisciplinary approach required to provide care in this complex situation.

The Patient

The patient was transferred to St George's Hospital, London for management at 25+5 weeks gestation G2P0, when the accreta was identified.

She had well controlled asthma, anaemia (Hb 99g/L Ferritin 11ug/L) and had an advanced directive declining transfusion of major blood components including pRBCs, platelets and plasma. She would accept minor fractions along with transfusion alternatives such as cell salvage.

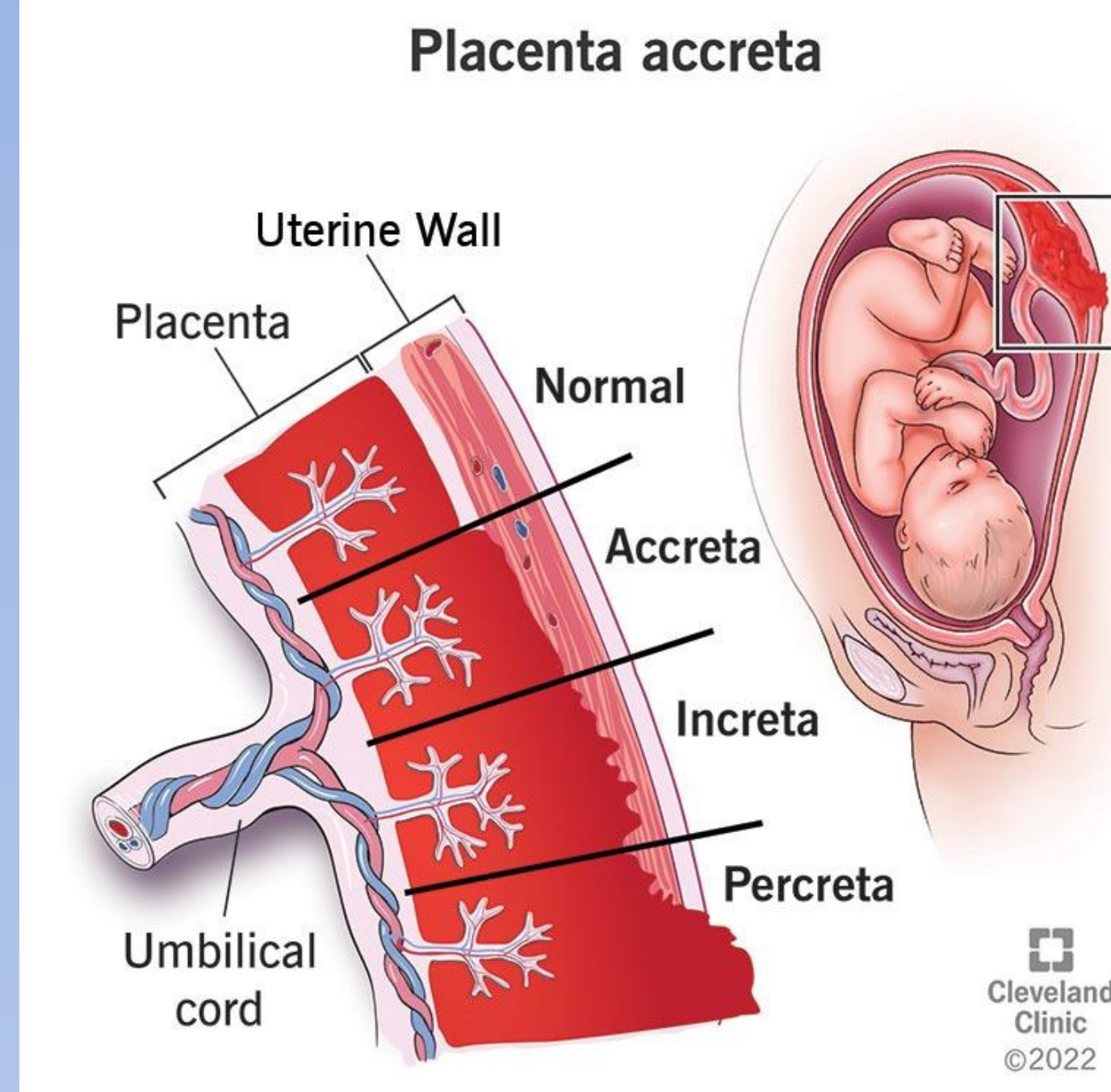
We treated her anaemia with IV Ferinject 1000mg and made plans for both elective LSCS at 32+4 weeks and emergency LSCS (emergency plan in brackets if different) if labour occurred before then.

Anaesthesia – GA

Surgical procedure: Hysterectomy, unless placenta completely detaches (hysterectomy from outset)

Interventional Radiology: From outset (IR if time allows)

In a normal pregnancy the placenta attaches to the decidualised endometrium. In placenta accreta spectrum the placental trophoblasts invade into the uterine myometrium. This is usually secondary to loss of the decidua which may occur in the scar of a previous caesarean section. Other risk factors include advanced maternal age and multiparity.



Hb pre op	102 g/dL
Measured Blood loss	2.6L
Blood collected in Cell Salvage	2.5L
Blood returned from Cell salvage	508ml
Hb post op	98 g/dL

Intra-operative blood loss, cell salvage and change in haemoglobin

Genesis 9:4

Only, you shall not eat flesh with its life, that is, its blood.

Leviticus 17:10

If anyone of the house of Israel or of the aliens who reside among them eats any blood, I will set my face against that person who eats blood, and will cut that person off from the people.

Acts 15:28–29

For it has seemed good to the Holy Spirit and to us to impose on you no further burden than these essentials: that you abstain from what has been sacrificed to idols and from blood and from what is strangled and from fornication. If you keep yourselves from these, you will do well. Farewell.”

The bible passages relating to Jehovah's Witness' beliefs on blood transfusion

The Operation

Elective caesarean-hysterectomy was performed at 32+4 weeks under general anaesthesia. After induction of anaesthesia, a second wide bore peripheral line, an arterial line and an RIJ CVC were inserted.

Interventional radiologists inserted occlusive balloons into both internal iliac arteries via femoral sheaths, then left them deflated until delivery. A wire was advanced into the abdominal aorta for aortic balloon occlusion should the need arise.

Surgery proceeded with a midline abdominal incision and transverse uterine incision to deliver the baby via breech extraction. The iliac balloons were then inflated; reducing, but not totally ceasing, uterine blood flow.

A hysterectomy was performed with estimated blood loss of 2.6L, of which 2.5L was salvaged to yield 508ml red cell autotransfusion. The patient was haemodynamically stable throughout and was extubated uneventfully.

She received 1g+1g Tranexamic acid, 508ml of cell salvage blood, 2L Hartmann's Solution and briefly required a phenylephrine infusion.

The patient was admitted to ITU overnight and made a good recovery which was complicated by an arterial thrombus at the IR balloon site, from which the patient fully recovered. The baby, having been intubated 5 minutes after delivery, was extubated the same evening and also recovered well.

Discussion

Use of general anaesthesia led to a good outcome in this case. There may also be benefit in using regional anaesthesia (RA) for Jehovah's Witnesses undergoing complex procedures.

RA has the advantage that the patient retains capacity and thus has the option for real-time decision making rather than relying on theoretical risk of haemorrhage. It may give women the best chance of survival if blood is required.

However we would argue that it places an extra burden on the anaesthetist to judge capacity in a dynamic situation and they may feel the need to delay general anaesthesia so the patient can see if the need for blood is absolute.

Therefore, we believe that cases with the potential for massive haemorrhage involving Jehovah's Witness should be always performed under general anaesthesia.

References

1. *Placenta Praevia and Placenta Accreta: Diagnosis and Management*. Jauniaux ERM, Alfirevic Z, Bhide AG, Belfort MA, Burton GJ, Collins SL, Dornan S, Jurkovic D, Kayem G, Kingdom J, Silver R, Sentilhes L on behalf of the Royal College of Obstetricians and Gynaecologists. 2018, Green-top Guideline No. 27a. British Journal of Obstetrics and Gynaecology, pp. 9-11.

