Placenta praevia – Anaesthesia guideline (GL766)

Approval

<table>
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<tr>
<th>Approval Group</th>
<th>Job Title, Chair of Committee</th>
<th>Date</th>
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<tr>
<td>Maternity &amp; Children’s Services Clinical Governance Committee</td>
<td>Chair, Maternity Clinical Governance Committee</td>
<td>9th January 2015</td>
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Change History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
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<tr>
<td>1.0</td>
<td>July 2005</td>
<td>Dr K J Bird &amp; Dr R Jones, Consultant Anaesthetists</td>
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<td>2.0</td>
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<td>Dr R Jones, Consultant Anaesthetist</td>
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Overview: Placenta praevia occurs when the placenta is implanted in the lower segment of the uterus making a normal vaginal delivery impossible because of the risk of major haemorrhage. All women must be delivered by LSCS. This is ideally performed as an elective procedure.

Precautions for ALL Placenta Praevias:
- Discuss with the surgeon their preference ideally before seeing the patient
- Discussion with the patient should honestly address the risks of bleeding, the need for blood transfusion and the possibility of intensive care post-operatively. The obstetricians should have mentioned the possibility of a hysterectomy.
- Very careful airway assessment (as always!)
- Senior/experienced help should be available for the anaesthetic and surgery.
- Cross matching advice
  - 2 unit cross match if risk factors:
    - Major praevia
    - Low haemoglobin
    - Anterior placenta praevia
    - Placenta accreta – suspected or diagnosed
    - Multiple fibroids
    - Surgical or anaesthetic decision
- If antibodies cross match additional units. Discuss with blood transfusion Carbetocin at following delivery plus availability of ergometrine and haemabate.
- 2 large bore cannulae. Intravenous fluids should be run through the warmer.
- Refresh memory with major haemorrhage guidelines
- Make sure paediatrician available
- Particular vigilance at time of delivery
- Maintenance of contraction of uterus and keeping up with blood loss is the first priority. Intravascular monitoring is of secondary importance
- Consider prophylactic use of a Rusch balloon if placental site inadequately contracting
Some relevant points
It is well known that there is a significant increase in maternal and foetal morbidity and mortality with this condition.

This is a technically difficult operation to perform for the obstetrician

The placenta praevia is normally graded from I-IV depending upon how far it encroaches / covers the os. This grading is less important at LSCS than whether it is anterior (i.e. under where the incision will be) or posterior (i.e. at the back of the uterus).

Bleeding form the placental site is more likely because the lower third of the uterus contracts poorly in comparison to the upper two thirds. It is this contraction which is paramount in cessation of bleeding.

The major hazards are from:
- Haemorrhage from either the incised placenta, bleeding placental site, placenta accreta
- Interruption of the foetal blood supply after incision of the placenta

Choice of anaesthetic:
There is no ideal form of anaesthetic technique for this condition. Both regional and general anaesthesia have been used successfully. The decision of which anaesthetic technique to choose is made after consultation with the anaesthetist, surgeon and patient. The advantages and disadvantages of both techniques are outlined below:

Regional technique:

Advantages:
- Mother awake
- Baby more awake
- Avoid risks of GA
- Pain relief /recovery better
- Probably less blood loss

Disadvantages:
- As surgery has to be hurried/rapid MUST have a good functioning block
- If substantial haemorrhage more difficult to maintain haemodynamic stability
- Blood loss/difficult LSCS may be distressing for patient/partner
- If surgery complicated/prolonged may well need to convert to GA at that point. Combination of major haemorrhage + regional block + GA not for the fainthearted
- Intubation in the face of the above should be slick and straightforward
General anaesthesia

Advantages:
- Better placed to deal with bleeding/difficult surgery if it should occur
- Less stressful once anaesthetised if problems are encountered for the patient / partner / theatre staff

Disadvantages:
- Risks of GA
- More postoperative pain
- Mother and partner miss out on birth of baby
- Increased (temporary) neonatal depression with the GA.

Factors to consider when making the decision in each case:
- Surgical wishes
- Patient wishes
- Position of placenta: anterior placenta makes it more difficult to deliver the baby
- Previous uterine surgery: risk of placenta accreta much greater, commonest scenario is previous LSCS and anterior placenta)
- Potential difficult intubation: much better to secure the airway when patient is in stable condition than when bleeding/complications are encountered
- Ante partum bleeding of any significance

References:
1. Why Mother’s Die 2000 –2002 CEMACH

Authors: Dr KJ Bird & Dr R Jones July 2005
Reviewed: August 2008, October 2012 (Dr G Jackson), November 2014
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