ROYAL HOSPITAL FOR WOMEN Approved by
LOCAL OPERATING PROCEDURES Quality & Patient Safety Committee
CLINICAL POLICIES, PROCEDURES & GUIDELINES MANUAL December 2010

PLACENTA PRAEVIA

1. OPTIMAL OUTCOMES

- Appropriate diagnosis and clinical management of woman with placenta praevia

2. PATIENT

- Pregnant woman with a low-lying placenta after 20 weeks gestation

3. STAFF

- Medical officers
- Registered midwives
- Sonographers

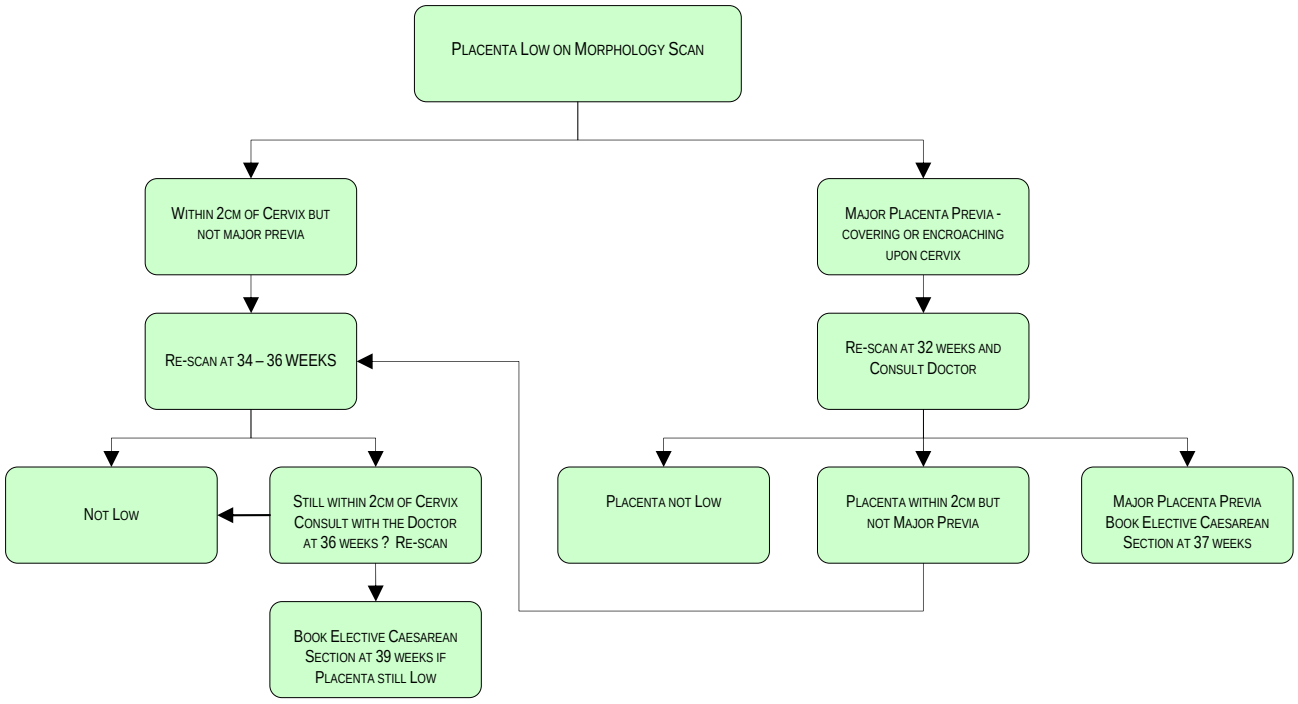
4. EQUIPMENT

- Ultrasound
- 16 gauge intravenous (IV) cannula
- Blood tubes
- Hand held Doppler

5. CLINICAL PRACTICE

Screening :

- Offer and recommend a morphology ultrasound scan on all pregnant women at 18-20 weeks
- Identify woman with a placenta within 2cm of the internal cervical os at this scan – see flow diagram for subsequent outcome



- Include on the ultrasound request that the woman has had a previous caesarean section and request that features of placenta accreta are examined
- Rescan all women who have placenta previa from 36-37 weeks

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PLACENTA PRAEVIA cont'd

Antenatal care :

- Counsel following the 3rd trimester ultrasound where the placenta remains low with regard to the following :
  - need for full blood count (FBC) and iron studies to be checked
  - risk of bleeding / haemorrhage and admission to hospital
  - increased risk of preterm labour/delivery
  - possible need for blood transfusion
  - the mode of delivery
  - potential for major surgical interventions including hysterectomy
- Advise woman to present immediately to their nearest Delivery Suite for assessment if bleeding or contractions occur during the pregnancy. Admission will be required for observation :
  - Insert at least one 16 gauge IV cannula
  - Collect blood for FBC, Group and hold and Kleihauer test
  - Coagulation studies if considered necessary
  - Perform cardiotocograph (CTG) – continuous if having ongoing bleeding
  - Consider steroids for neonatal lung maturation
  - Women who are Rh negative should have Anti-D
  - Use tocolysis with caution, following discussion with consultant on call
- Prescribe appropriate prophylaxis for venous thromboembolism for a woman with prolonged hospitalization

Birth :

- Plan caesarean section at 37 weeks gestation following steroid cover for major placenta previa, in the absence of the indication for earlier delivery
- Plan caesarean section at 39 weeks gestation for minor placenta previa
- Consult and document with consultant obstetrician regarding mode of birth if the placenta remains within 2cm of the internal os and :
  - Collect blood for FBC and group and hold prior to caesarean section. If placenta is anterior, cross-match 2 units and have blood available in theatre
  - Anaesthetic – discuss with anaesthetic consultant option of regional versus general anaesthesia
  - Obstetric consultant should be present for all deliveries when an anterior placenta praevia is present or any suggestion of an accreta
  - Obstetric consultant should be present for all deliveries with a Registrar of 4 years or less when a posterior placenta praevia is present
  - Massive transfusion protocol may need to be activated if there is significant ongoing blood loss
  - Prepare for post-partum haemorrhage

6. HAZARDS / SUB-OPTIMAL OUTCOMES

Maternal :

- Increased risk of febrile morbidity
- Antepartum haemorrhage
- Postpartum haemorrhage
- Hypovolaemic shock
- Disseminated intravascular coagulation (DIC)
- Total or partial hysterectomy
- Maternal anemia
- Mortality

Fetal :

- Increased risk of premature delivery
- Growth restriction
- Mortality

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PLACENTA PRAEVIA cont'd

7. DOCUMENTATION

- Integrated clinical notes
- Yellow card

8. EDUCATIONAL NOTES

- Major placenta previa = placenta covering or encroaching upon the internal cervical os
- Minor placenta previa = placenta within 2cm but not covering the internal cervical os

Screening :

- Assessment of placenta praevia with transvaginal ultrasound is accurate and safe[1]
- Unless placental edge is at least reaching the internal os at the morphology scan, placenta praevia at term is unlikely[2 and 3]
- Previous LSCS increases the risk of developing placenta praevia in subsequent pregnancies[4]

Antenatal care :

- Little evidence of advantage of home vs hospital care[5]
- Prolonged inpatient care is associated with an increased risk of thromboembolism, gentle mobilisation and TEDs stockings are recommended in all hospitalised women. Anticoagulation is reserved for high risk cases only, and unfractionated heparin should be used[6]
- There is an association between placenta praevia and intra uterine growth restriction[7]

Delivery :

- For optimal neonatal outcome, gestational age for caesarean section in major placenta praevia is 37 weeks with steroid cover[7]

9. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE GUIDELINES

- Massive transfusion protocol
- Placenta accreta
- Thromboprophylaxis in pregnancy
- Obesity in pregnancy
- Conditions and procedures requiring specialist obstetric attendance
- Post Partum Haemorrhage - Prevention and Management

10. REFERENCES

1 Bhide A, Thilaganathan B. Recent advances in the management of placenta praevia. Current Opinion in Obstetrics and Gynecology 2004; 16:447-451
2 Taipale P, Hiilesmaa V, Ylostalo P. Transvaginal ultrasonography at 18-23 weeks in predicting placenta previa at delivery. Ultrasound Obstet Gynecol 1998; 12:422-425
3 Becker R, Vonk R, Mende B, et al. The relevance of placental location at 20-23 gestational weeks for prediction of placenta previa at delivery: evaluation of 8650 cases. J Perinat Med 2002; 30:388-342
4 Ananth C, Smulian J, Vintzileos A. The association of placenta previa with history of caesarean delivery and abortion: A metaanalysis. Am J Obstet Gynecol 1997; 177:1071-8
5 Neilson JP. Interventions for suspected placenta praevia. Cochrane Database of Systematic Reviews 2003, Issue 2
6 RCOG. Placenta praevia and placenta accreta: Diagnosis and management. Green Top Guidelines No. 27 revised 2005
7 Ananth C, Smulian J, Vintzileos A. The effect of placenta previa on neonatal mortality: A population-based study in the United States, 1989 through 1997. Am J Obstet Gynecol 2003; 188:1299-1304