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Placenta Praevia and Placenta Accreta: Diagnosis and Management

Green-top Guideline No. 27a

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Placenta Praevia and Placenta Accreta: Diagnosis and Management

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This is the fourth edition of this guideline. The first, published in 2001, was entitled *Placenta Praevia: Diagnosis and Management*; the second, published in 2005, was entitled *Placenta Praevia and Placenta Praevia Accreta: Diagnosis and Management*; and the third, published in 2011, was entitled *Placenta Praevia, Placenta Praevia Accreta and Vasa Praevia: Diagnosis and Management*.

The management and diagnosis of vasa praevia is addressed in Green-top Guideline No. 27b.

Executive summary

Antenatal diagnosis and care of women with placenta praevia or a low-lying placenta

What are the risk factors for women with placenta praevia or a low-lying placenta?

Caesarean delivery is associated with an increased risk of placenta praevia in subsequent pregnancies. This risk rises as the number of prior caesarean sections increases. [*New 2018*] B

Assisted reproductive technology and maternal smoking increase the risk of placenta praevia. [*New 2018*] B

Should we screen women for placenta praevia or a low-lying placenta, if so, at what gestation and with what follow-up?

The midpregnancy routine fetal anomaly scan should include placental localisation thereby identifying women at risk of persisting placenta praevia or a low-lying placenta. [*New 2018*] ✓

The term placenta praevia should be used when the placenta lies directly over the internal os. For pregnancies at more than 16 weeks of gestation the term low-lying placenta should be used when the placental edge is less than 20 mm from the internal os on transabdominal or transvaginal scanning (TVS). [*New 2018*] D

If the placenta is thought to be low lying (less than 20 mm from the internal os) or praevia (covering the os) at the routine fetal anomaly scan, a follow-up ultrasound examination including a TVS is recommended at 32 weeks of gestation to diagnose persistent low-lying placenta and/or placenta praevia. D

What is the role and what are the risks of TVS?

Clinicians should be aware that TVS for the diagnosis of placenta praevia or a low-lying placenta is superior to transabdominal and transperineal approaches, and is safe. [*New 2018*] ✓

In women with a persistent low-lying placenta or placenta praevia at 32 weeks of gestation who remain asymptomatic, an additional TVS is recommended at around 36 weeks of gestation to inform discussion about mode of delivery. [*New 2018*] D

Cervical length measurement may help facilitate management decisions in asymptomatic women with placenta praevia. A short cervical length on TVS before 34 weeks of gestation increases the risk of preterm emergency delivery and massive haemorrhage at caesarean section. [*New 2018*] D

Where should women with a low-lying placenta or placenta praevia be cared for in the third trimester?

Women with recurrent bleeding (low-lying placenta or placenta praevia)

Tailor antenatal care, including hospitalisation, to individual woman's needs and social circumstances, e.g. distance between home and hospital and availability of transportation, previous bleeding episodes, haematology laboratory results, and acceptance of receiving donor blood or blood products. [*New 2018*] ✓

Where hospital admission has been decided, an assessment of risk factors for venous thromboembolism in pregnancy should be performed as outlined in the Royal College of Obstetricians and Gynaecologists Green-top Guideline No. 37a. This will need to balance the risk of developing a venous thromboembolism against the risk of bleeding from a placenta praevia or low lying placenta. D

It should be made clear to any woman being treated at home in the third trimester that she should attend the hospital immediately if she experiences any bleeding, including spotting, contractions or pain (including vague suprapubic period-like aches). ✓

Asymptomatic women (low-lying placenta or placenta praevia)

Women with asymptomatic placenta praevia or a low-lying placenta in the third trimester should be counselled about the risks of preterm delivery and obstetric haemorrhage, and their care should be tailored to their individual needs. ✓

Women with asymptomatic placenta praevia confirmed at the 32-week follow-up scan and managed at home should be encouraged to ensure they have safety precautions in place, including having someone available to help them as necessary and ready access to the hospital. ✓

Is there a place for cervical cerclage in women with placenta praevia or a low-lying placenta?

The use of cervical cerclage to reduce bleeding and prolong pregnancy is not supported by sufficient evidence to recommend its use outside of a clinical trial. ✓

In what circumstances, and at what gestation, should women be offered antenatal corticosteroids?

A single course of antenatal corticosteroid therapy is recommended between 34^{+0} and 35^{+6} weeks of gestation for pregnant women with a low-lying placenta or placenta praevia and is appropriate prior to 34^{+0} weeks of gestation in women at higher risk of preterm birth. [*New 2018*] ✓

Is there a place for the use of tocolytics in women presenting with symptomatic low-lying placenta or placenta praevia, who are in suspected preterm labour?

Tocolysis for women presenting with symptomatic placenta praevia or a low-lying placenta may be considered for 48 hours to facilitate administration of antenatal corticosteroids. [*New 2018*] C

If delivery is indicated based on maternal or fetal concerns, tocolysis should not be used in an attempt to prolong gestation. [*New 2018*] C

At what gestation should planned delivery occur?

Late preterm (34^{+0} to 36^{+6} weeks of gestation) delivery should be considered for women presenting with placenta praevia or a low-lying placenta and a history of vaginal bleeding or other associated risk factors for preterm delivery. [*New 2018*] C

Delivery timing should be tailored according to antenatal symptoms and, for women presenting with uncomplicated placenta praevia, delivery should be considered between 36^{+0} and 37^{+0} weeks of gestation. [*New 2018*] C

In what situations is vaginal delivery appropriate for women with a low-lying placenta?

In women with a third trimester asymptomatic low-lying placenta the mode of delivery should be based on the clinical background, the woman's preferences, and supplemented by ultrasound findings, including the distance between the placental edge and the fetal head position relative to the leading edge of the placenta on TVS. [*New 2018*] D

Optimising the delivery of women with placenta praevia

Prior to delivery, all women with placenta praevia and their partners should have a discussion regarding delivery. Indications for blood transfusion and hysterectomy should be reviewed and any plans to decline blood or blood products should be discussed openly and documented. ✓

Placenta praevia and anterior low-lying placenta carry a higher risk of massive obstetric haemorrhage and hysterectomy. Delivery should be arranged in a maternity unit with on-site blood transfusion services and access to critical care. D

Women with atypical antibodies form a particularly high-risk group and the care of these women should involve discussions with the local haematologist and blood bank. D

Prevention and treatment of anaemia during the antenatal period is recommended for women with placenta praevia or a low-lying placenta as for any pregnant woman. D

Delivery for women with placenta praevia or a low-lying placenta

What grade of obstetrician and anaesthetist should attend the caesarean delivery of a woman with placenta praevia?

As a minimum requirement for a planned caesarean section for a woman with placenta praevia, the surgical procedure should be carried out by an appropriately experienced operator. [*New 2018*] ✓

In cases of planned caesarean section for placenta praevia or a low-lying placenta, a senior obstetrician (usually a consultant) and senior anaesthetist (usually a consultant) should be present within the delivery or theatre suite where the surgery is occurring. ✓

When an emergency arises, the senior obstetrician and senior anaesthetist should be alerted immediately and attend urgently. ✓

What anaesthetic procedure is most appropriate for women having a caesarean section for placenta praevia?

Regional anaesthesia is considered safe and is associated with lower risks of haemorrhage than general anaesthesia for caesarean delivery in women with placenta praevia or a low-lying placenta. Women with anterior placenta praevia or a low-lying placenta should be advised that it may be necessary to convert to general anaesthesia if required and asked to consent. [*New 2018*] D

What blood products should be available?

Close liaison with the hospital transfusion laboratory is essential for women presenting with placenta praevia or a low-lying placenta. [*New 2018*] ✓

Rapid infusion and fluid warming devices should be immediately available. [*New 2018*] ✓

Cell salvage is recommended for women where the anticipated blood loss is great enough to induce anaemia, in particular, in women who would decline blood products. D

What surgical approach should be used for women with placenta praevia or a low-lying placenta?

Consider vertical skin and/or uterine incisions when the fetus is in a transverse lie to avoid the placenta, particularly below 28 weeks of gestation. [*New 2018*] ✓

