NHS
Birmingham Women's and Children's
NHS Foundation Trust

By your side

Referral Pathway for Placenta Accreta Spectrum (PAS)

For centres whose NHS England designated PAS centre is Birmingham Women's Hospital

Placenta Accreta Spectrum

- Placenta accreta spectrum (PAS) is where the placenta is abnormally attached to or invaded into the uterine wall and it carries a significantly increased risk of haemorrhage and hysterectomy, with increased risks of maternal morbidity and mortality.
- Maternal morbidity and mortality are significantly reduced when the woman is referred early for diagnosis and management in a PAS centre of excellence.
- The risk of PAS is significantly increased with an anterior placenta in the presence of previous caesarean delivery (the risk increases with the number of previous caesarean deliveries).
- Patients diagnosed with a caesarean scar ectopic pregnancy (CSEP) are likely to go on to develop PAS.
- Patients with a history of previous PAS are at high risk (1:5) of PAS in a subsequent pregnancy.
- Patients with a history of a full-thickness scar to their uterus (e.g. myomectomy breaching the cavity) are also at risk of PAS.

NHS England Specialist Commissioning: West Midlands Network

NHSE have commissioned four Trusts in the West Midlands to provide PAS care for all the women in the West Midlands region.

Birmingham Women's Hospital (BWH) has been commissioned to provide PAS services to:

- **Worcester Royal Hospital**
- **Hereford County Hospital**
- **Warwick Hospital**

This document aims to clarify the referral pathway for the service.

Screening for PAS at the mid-trimester anomaly scan

- As a routine, placental localisation should be determined at the time of the mid-trimester anomaly scan (Mid T scan) in all pregnant women.
- In the case of late bookers, placental localisation should be performed at the first scan.

Placenta Praevia

- The term **placenta praevia** should be used only when part of the placenta lies directly over the internal os.
- If placenta praevia is suspected at the Mid T scan (or first scan in a late booker), the sonographer will ask the woman if she has had a previous caesarean delivery:

If the answer is YES;

- Refer the woman to the BWH FMU placenta clinic for PAS screening indicating the need to exclude accreta.
    - Include information on the number of previous caesarean deliveries and if she has bled after 12 weeks' gestation.
- Inform the woman that;
    - PAS is very rare and so it is unlikely she will have it but she needs to attend the scan at BWH
    - She will probably be scanned in FMU at around 28 weeks' gestation
    - A full bladder is required for this scan
    - A transvaginal scan may be necessary

If the answer is NO;

- Manage as per local guidelines.

Anterior Low-lying placenta

- For pregnancies at more than 16 weeks of gestation the term low-lying placenta should be used when the placental edge is less than 2cm from the internal os on transabdominal or transvaginal scanning (TVS).
- If an **anterior** low lying placenta is seen at the Mid T scan (or first scan in a late booker), the sonographer will ask the woman if she has had a previous caesarean delivery:

If the answer is YES;

- Organise another local scan between 27^{+0} and 28^{+0} weeks' gestation
- Inform the woman that a full bladder is required for this scan

If the answer is NO;

- Manage as per local guidelines.

Anterior Low lying Placenta Scan at 27-28 weeks

- The scan must be undertaken with a filled bladder, preferably 250-300ml.

If the placenta remains anterior and <2cm from the internal os;

- Refer the woman to the BWH FMU placenta clinic for PAS screening indicating the need to exclude accreta.
    - Include information on the number of previous caesarean deliveries and if she has bled after 12 weeks' gestation.
- Inform the woman that;
    - PAS is very rare and so it is unlikely she will have it, but she needs to attend the scan at BWH
    - She will be seen in FMU in the next 2 weeks, and she should contact BWH FMU if she does not receive an appointment in that timeframe
    - A full bladder is required for this scan
    - A transvaginal scan may be necessary

If the placenta is >2cm from the internal os;

- Manage as per local guidelines.

Other Risk Factors for PAS

Caesarean scar ectopic pregnancy (CSEP)

- If CSEP is suspected at the first trimester scan, refer the woman to the BWH FMU placenta clinic, preferably with information on the number of previous caesarean deliveries.

History of previous PAS

- If the woman reports a history of previous PAS, refer the woman to the BWH FMU placenta clinic, preferably with information on the number of previous caesarean deliveries.

History of previous uterine surgery which has resulted in a full-thickness myometrial scar

- Examples of this include:
    - Classical caesarean incision
    - Myomectomy which breached the uterine cavity
    - Cornual ectopic resulting in surgical trauma to the uterine corpus itself
    - Traumatic uterine injury e.g. confirmed perforation at ERPC

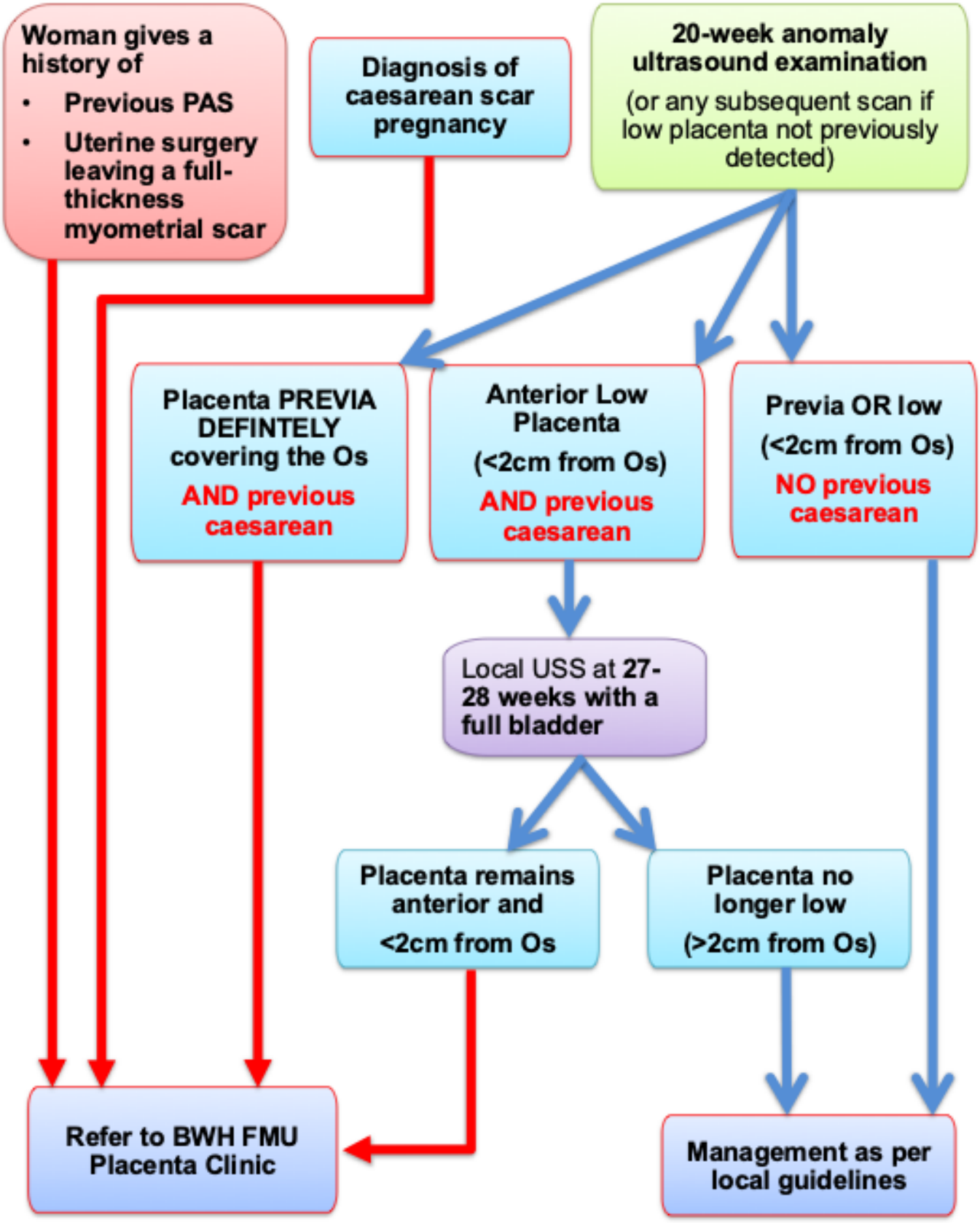
- If the woman reports a history of previous surgery which has left a full thickness scar, refer the woman to the BWH FMU placenta clinic, preferably with information on the history of the scar.

Ultrasound signs of PAS

- If at any point in pregnancy a sonographer sees signs that may be in keeping with PAS (see Appendix 3) they should refer to the local fetal medicine consultant for review.

- If that consultant has any concerns refer the woman to the BWH FMU placenta clinic.

Appendix 1 – Flow diagram for referral to the BWH PAS clinic



Appendix 2 – Advice on performing a placental localisation

- Perform a transabdominal scan initially to check for viability and perform a growth scan
- Locate the placenta and assess the whole of the lower pole of the uterus including the lateral aspects
- If the placenta is anterior obtain a long section of the uterus, including the cervix, to enable accurate location of the internal os.
- Measure from the leading edge of the placenta to the internal os in cm.
- If this is not clear or there is any doubt regarding the relationship of the placenta to the internal os, then a transvaginal scan must be performed
- A transvaginal scan must be performed if the placenta is posterior or you are in doubt regarding its position
- Transvaginal Scan:
    - Explain the procedure to the woman and obtain consent.
    - Ask the woman to empty their bladder.
    - Check if they have a latex allergy.
    - Perform the transvaginal examination by locating the cervical canal and internal os.
    - Measure from the leading edge of the placenta to the internal os in cm.
    - Assess whether the fetal head is against the cervix
- Report:
    - Indicate whether you have performed a transvaginal scan.
    - Comment on where the placenta is located and if it extends laterally.
    - Record distance of the lower edge of the placenta in relation to the internal os or state if the placenta is covering the internal os
    - Also record whether the fetal head is below the leading edge.
- Images to store
    - Long section of the cervix, demonstrating the internal os.
    - Leading edge of the placenta in relation to the internal os.
    - Calliper placement from the internal os to the leading edge of the placenta. This may be in sections rather than a straight line.

Appendix 3 - Placenta Accreta Spectrum Ultrasound Signs (see reference below)

- Greyscale signs
    - Loss of the retroplacental ‘clear’ zone
    - Abnormal placental lacunae
    - Bladder wall interruption
    - Myometrial thinning (<1mm)
    - Presence of focal exophytic masses projecting into the urinary bladder

- Colour Doppler
    - Feeder vessels into the placental lacunae with high velocity flow (peak systolic velocity over 15 cm/s)
    - Bridging vessels
    - Utero-vesical or sub-placental hypervascularity

Reference:

Proposal for standardized ultrasound descriptors of abnormally invasive placenta (AIP) S. L. Collins, A. Ashcroft, T. Braun, P. Calda, J. Langhoff-Roos, O. Morel, et al. Ultrasound Obstet Gynecol 2016 Vol. 47 Issue 3 Pages 271-5. DOI: 10.1002/uog.14952

https://www.ncbi.nlm.nih.gov/pubmed/26205041