PLACENTAL ANOMALY

Document Reference No:	PTHB / MAT 082	
Version No:	1	
Issue Date:	February 2023	
Review Date:	February 2026	
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Document Owner:	Head of Midwifery and Sexual Health	
Accountable Executive:	Director of Nursing/ Director therapy and health Sciences	
Approved By:	Director of Nursing and Midwifery	
Approval Date:	24/01/2023	
Document Type:	Standard Operating Procedure	Clinical
Scope:	PTHB Maternity Services	

The latest approved version of this document is online.
If the review date has passed please contact the Author for advice.

Version Control

Version	Summary of Changes/Amendments	Issue Date
1	Initial Issue	February 2023

ENGAGEMENT & CONSULTATION

Key Individuals/Groups Involved in Developing this Document

Role / Designation
Governance and Lead Sonographer
Professional Head of Radiography
Women and Childrens Policy and Procedures Oversight Group
Assistant Head of Midwifery

Circulated to the following for Consultation

Date	Role / Designation
08/02/22	Head of Midwifery, Assistant Head of Midwifery, Consultant Midwife, Director of Nursing, W&C Risk and Governance Lead, Policy and Procedure Group
08/02/22	DAU Midwife Sonographers, Community Midwives, Maternity Support Workers, Head of Radiology, Training and Governance Lead for Ultrasound, Safeguarding, Quality and Safety
07/03/22	Maternity Policies, Procedures Sub-Group
21/03/22	Women and Childrens Policy and Procedures Oversight Group
14/07/22	Assistant Head of Midwifery, Consultant Midwife, Head of Radiology, Governance and Lead for Sonographer, Supervisor of Midwives
1/9/22	Head of Therapies, Governance and Lead Sonographer, Head of Radiology
28/10/22	Head of Radiology
14/11/22	Heads of Radiology Meeting

Evidence Base
Royal College of Obstetricians and Gynaecologists (2018) Green-top Guideline No. 27a Placenta Praevia and Placenta Accreta: Diagnosis and Management. Antenatal Screening Wales Obstetric Ultrasound Handbook for sonographers delivering the antenatal screening programme in Wales. (2020) All Wales Midwifery Led Care (2018) NICE Antenatal care (2021)

IMPACT ASSESSMENTS

Equality Impact Assessment Summary					
	No impact	**Adverse**	**Differential**	**Positive**	**Statement** ***Please provide supporting narrative for any adverse, differential or positive impacts that may arise from the implementation of this policy***
Age	x				
Disability	x				
Gender reassignment	x				
Pregnancy and Maternity	x				
Race	x				
Religion or Belief	x				
Sex	x				
Sexual Orientation	x				
Marriage and Civil Partnership	x				
Welsh Language	x				

Risk Assessment Summary
Have you identified any risks arising from the implementation of this policy / procedure / written control document? No risks identified.
Have you identified any Information Governance issues arising from the implementation of this policy / procedure / written control document? No information governance issues arising.
Have you identified any training and / or resource implications as a result of implementing this? No resource implications identified.

1 Introduction and Purpose

The routine mid pregnancy fetal anomaly scan at 18^{+6} to 21^{+6} should include placental localisation thereby identifying women at risk of a persisting placenta previa or a low-lying placenta. Placenta accrete and vasa previa may also be identified during this scan.

The morbidity and mortality from placenta previa and placenta accrete are considerable in both mother and fetus. Vase previa carries no major maternal risk but is associated with significant risk to the fetus.

The definition of placenta previa is a placenta that directly covers the internal os. Pregnancies over 16 weeks where the placenta is less than 20mm from the internal os are classified as low lying. The estimated incidence of placenta previa at term is 1 in 200 pregnancies. Placenta previa is associated with previous caesarean birth, assisted reproductive technology and maternal smoking.

Placenta accreta is defined as the abnormal adherence of the placenta to the uterine wall and can be limited to the myometrial wall or penetrate as far as into the surround organs. The difficult in accurate diagnosis has resulted in a variable prevalence rate from 1 in 300 to 1 in 2000.

Vasa previa is a rare condition with a prevalence of 1:1200 to 1:5000 pregnancies. The fetal vessels run within the membranes in close proximity to the internal os.

The relationship of the placenta to the internal os is determined by ultrasound and management decisions are based on the clinical evidence provided by ultrasound.

Consistent management of placenta previa, placenta accreta and vasa previa make it easier to counsel women and their partner reducing anxiety after the initial diagnosis.

Ladies who could be at a greater Risk of Placental Problems:

- Smoking
- Previous cesarean section
- IVF pregnancies
- Previous Placenta Previa
- Multiple pregnancies
- Women over 40
- Previous abortion or surgery to the womb

2 Objectives

The purpose of the SOP is to guide ultrasound staff as to how to proceed when placenta accreta, placenta previa or vasa previa are suspected in an asymptomatic woman during and after the anomaly ultrasound screening.

3. Definitions

- **PTHB** – Powys Teaching Health Board
- **DAU**- Day assessment unit
- **DGH**- District General hospital
- **USS**- Ultrasound scan
- **APH**- Antepartum Hemorrhage
- **SDP**- Single Deepest Pool (Referring to Amniotic Fluid)
- **EFW**- Estimated Fetal Weight
- **FMU-** Fetal Medicine Unit
- **W & C** Women's and Children's
- **SOP-** Standard Operating Procedure
- **MSW-** Maternity Support Worker
- **SOP-** Standard Operating Procedure
- **RCOG -** Royal College of Obstetricians and Gynecologists

4 Roles and Responsibilities

4.1 Head of Department

The Head of the Department must:

- Ensure all staff read and understand this procedure
- Arrange regular review to monitor compliance with this procedure
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4.2 Head of DAU / Assistant Head of Midwifery

The Head of DAU has responsibility for:

- Overseeing compliance with training and service development
- Provide leadership and support
- Overseeing the day to day running of the service
- Ensure all staff members act in accordance to NMC code of conduct
- Be accountable for DAU
- Arranging yearly mandatory update training
- Overseeing and dealing with the service, provision, developments and issues

Professional Head of Radiography

- To provide professional oversight for the delivery of sonography service for the DAU
- Professional accountability for governance of images
- Professional responsibility for equipment in line BMUS guidance
- Professional management for PACS
- Professional line manager for the governance and lead sonographer

4.3 Governance and Lead Sonographer

To provide the leadership, governance and service improvement for the sonography element of DAU
To ensure all Practitioners are complying to agreed national and local protocols for sonography/images
Ensure staff have access to relevant training
Quality and Assurance of images
Oversea and provide preceptorship
Accountable for staff training both access and delivery for sonography
Accountable for clinical supervision of sonography
Provide continuous professional development for best practice for sonography
To provide clinical advice and support for midwifes and senior managers
Advise on DATIX submissions with regard to sonography

4.4 Midwife Sonographer / Sonographer

The sonographer must registered and comply with the NMC/HCPC (registered body) standards
Maintain professional competency qualifications in obstetric Ultrasound.
The scans must be reported on the RadIS system using the relevant template and images must be stored on the relevant PACS system to allow adequate monitoring, audit data and image review as per ASW guidelines (refer to ASW standards, protocols, and ultrasound handbook for compliance standards).

It is the Sonographers role to ensure follow on pathways of care are in place post scan.

5 Placental Anomaly Identification and Management

5.1 Placenta Previa and Low-Lying Placenta

The fetal anomaly scan should be performed between 18^{+6} weeks and 20^{+6} in accordance with Antenatal Screening Wales standards (2020). The placenta should be examined by performing a transverse and longitudinal sweep of the uterus. The optimum view of the placenta is with a full bladder to aid in viewing the internal cervical os so that a measurement can be taken from the placental edge to the internal os. It is also important to ensure that a lower segment uterine contraction is not giving a false positive finding.

The uterine wall the placenta is attached to and the lower edge of the placenta in relation to the internal os must be recorded, with an image stored on PACS and reported on RadIS as ASW standard.

The placenta is reported as low lying, if clear of the os but < 20mm from the os. It is reported as Previa if covering the os. (RCOG Green Top Guidelines, 2018)

A rescan can be booked at 32 weeks, if the placenta is low lying and the woman is **asymptomatic**. The woman must be advised to attend with a full bladder again, and the importance of this explained. If at this scan, the placenta is measuring as low lying and is asymptomatic, a transvaginal ultrasound scan is considered gold standard. The woman will need to be referred to a District General Hospital for further evaluation of the placenta site by transvaginal scanning. **This TV scan is not provided in Powys THB.**

Professional RCM advice should be given with regards to the potential of bleeding, what may increase the chance of bleeding and what to do if bleeding occurs.

A RCOG patient leaflet should also be given explaining and advising on a low lying placenta: https://www.rcog.org.uk/en/patients/patient-leaflets/placenta-praevia/

If the placenta is covering the os, i.e Placenta Previa, the woman should be referred for a Consultant review in a DGH.

The woman should be informed of the ultrasound findings and advised to attend hospital immediately if she experiences any bleeding and to mention that she is under review for placenta previa. The community midwife should be informed that a referral to a Consultant/ senior obstetrician has been made.

5.2 Placenta Accreta

Placenta Accreta is rare but is a morbidly adherent placenta. The placenta penetrates through the decidua basalis into and then through the myometrium. Women with previous caesarean section require a higher level of suspicion for Placenta Previa or Accreta.

If the placenta is low lying, <20 mm at the anatomy scan, a 32 week gestation scan must be arranged. An assessment of the placenta in relation to the internal os and the caesarean scar needs to be reported. A full maternal bladder is required for accurate evaluation. In cases where the anterior placenta is underlying a caesarean scar or placenta accreta is suspected, the woman must be referred to the antenatal clinic at a DGH for Consultant/ senior obstetric review.

5.3 Vasa Previa

Vasa Previa is very rare and describes fetal vessels crossing through the membranes over the internal os below the fetal presenting part. This can be secondary to a velamentous cord insertion in a single or bi-lobed placenta or from fetal vessels running between lobes of a placenta with one or more accessory lobes (succenturiate lobes).

If a succenturiate lobe is identified at the anomaly scan, as long as it is clear of the internal os it should be reported but otherwise no further action is required.
If however there is evidence to suggest vasa previa a referral to a Consultant/ senior obstetrician is required for plan of care.

6 Infection Prevention

ALL staff should follow the local guidelines on infection prevention. Specific ultrasound protocols relating to the cleaning and decontamination of ultrasound equipment are located in the infection control folder at each midwifery ultrasound site.

Personal protective equipment is provided in the form of gloves and aprons for use while performing the ultrasound scan and cleaning the equipment following the recommended guidelines.

Trophon and Tristel training must be undertaken annually by all sonographers and the cleaning systems used in accordance with manufacturer's instructions.

The certificates of training for both decontamination systems must be presented to the Head of Radiology in readiness for the annual revalidation process of the equipment.

7 Governance

7.1 Quality

National governance for ultrasound standards will be implemented throughout the day assessment unit to ensure service standards and the processes for training, supervision and audit and thus achieving the maintenance of high levels of competence, performance and patient safety.

7.2 Learning and Improving

All changes to local and national guidelines where relevant, are to be implemented in a timely manner and lead by the Governance and lead sonographer. Evidence-based practice and best practice should be the gold standard for the Obstetric Ultrasound service.

The day assessment staff will be required to complete all mandatory training. The requirements for job specific ultrasound training is specified by the DAU Governance Lead and compliance assessed during individual PADR performance review. Requests for additional learning are assessed on alignment with the Health and Care Strategy and role/ individual development to aid service improvement in the DAU.

Service user review will be undertaken through QR codes, service user groups, incident reviews and any resolution team feedback.

7.3 Monitoring and Compliance

Benchmarking of the DAU service provision must be performed to ensure the service is efficient and continues to meet the needs of the population it serves. Patient communication must form part of the review and include a user review of the DAU. Review of datix submissions from surrounding DGH's involving the DAU will be investigated thoroughly and feedback to the DAU team on conclusion.

It is a requirement that a DATIX is submitted for an incident listed on the 'Incident notification List' and any adverse incident that is of concern and requires further investigation. Feedback of findings and trends should be undertaken at regular intervals through the clinical incident meetings held monthly.

Peer/ consultant review of cases will be arranged periodically to monitor practice. It is a requirement that all DAU staff attend a local DGHs perinatal review meeting.

Patient Administration Systems will be used to monitor activity in the DAU.

7.4 Audit and Review

Quality and assurance audit will be carried out monthly with feedback to Midwife Sonographers/ Sonographers
Auditing will be performed to ensure quality, compliance with clinical professional standards.

Record keeping audits must be performed to ensure compliance with NMC/HCPC/DQASS standards using the template created by the Supervisor of Midwives and Governance and lead sonographer. Balanced feedback should be provided to sonographers for reflection and practice review. Review of the audit should recognize trends for further investigation and learning.

Self-audit of ultrasound images and record-keeping forms part of the audit and review process and time must be allocated for this to occur.

This document will be reviewed every three years or earlier should audit results or changes to legislation / practice within PTHB indicate otherwise.

8 References / Bibliography

1. Placenta Previa and Placenta Accreta Diagnosis and Management Green-top guidelines No. 27a and Vasa Previa 27b 2018 RCOG

2. MBRRACE – UK (2016) Saving Lives, Improving Mother's care. Surveillance of Maternal Deaths in the UK. www.npeu.ox.ac.uk/mbrrace-uk/reports

3. National Institute of Clinical Excellence (2016) Antenatal Care Clinical Guideline. ww.nice.org.uk

4. National Maternity Review (2016) Better Births – Improving outcomes of maternity services www.england.nhs.uk/mat-transformation/mat-review/

5. Nursing and Midwifery Council (2018) The Code – Professional Standards of practice and behaviour for nurses and midwives. www.nmc-uk.org

6. ASW Handbook for Sonographers is 4th Edition 2020 Version 8.

7. Society and College of Radiographers / British Medical Ultrasound (2017) Society Standards for the provision of an ultrasound service.

8. Society and College of Radiographers / British Medical Ultrasound (2017) Guidelines for Professional Ultrasound Practice.

Appendix A

Appendix A: Placental Clinical Pathway