CLINICAL POLICY
Ultrasound Assessment within the Pregnancy Advisory Service (PAS)

Policy Number	CLP165
Version:	V1
Purpose:	The policy provides guidance for the provision of ultrasound scanning within the pregnancy advisory service
Consultation:	Staff providing PAS assessments and staff responsible for the early pregnancy service in GHC
Approved by:	Clinical Policy Group and any other approving groups
Date approved:	19/12/2023
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Audience:	All staff working in the pregnancy advisory service (PAS)
Dissemination:	GHC intranet and by email to staff working in the PAS
Impact Assessments:	This Policy has been subjected to an Equality Impact Assessment. This concluded that this policy will not create any adverse effect or discrimination on any individual or particular group and will not negatively impact upon the quality of services provided by the Trust

Version History

Version	Date Issued	Reason for Change
V1	10/01/2024	New Policy

SUMMARY

This document aims to ensure that provision of ultrasound scanning within the PAS is consistent and meets the agreed standards. In a step-wise approach it describes indications for ultrasound scanning, the procedure, the management of non-routine findings and complications of abortion, infection control, documentation and image archiving. The document also outlines processes in place for training and monitoring compliance.

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ABBREVIATIONS

Abbreviation	*Full Description*
GHC	Gloucestershire Health and Care NHS Foundation Trust
GRH	Gloucestershire Royal Hospital
GHNHSFT	Gloucestershire Hospitals NHS Foundation Trust
BPD	Biparietal diameter
CPD	Continuing professional development
CRL	Crown rump length
EMAH	Early medical abortion at home
EMA	Early medical abortion
EPAU	Early Pregnancy Assessment Unit
FH	Fetal heart
FL	Femur length
GA	General anaesthetic
GS	Gestation sac
GUM	Genitourinary medicine
HC	Head circumference
HCG	Human chorionic gonadotropin
MSD	Mean sac diameter
MVA	Manual vacuum aspiration
PACS	Picture archiving and communication system
PAS	Pregnancy Advisory Service
PUL	Pregnancy of unknown location (where a biochemical pregnancy is confirmed but no evidence of pregnancy visualised on scan)
PUV	Pregnancy of uncertain viability
RCOG	Royal College of Obstetricians and Gynaecologists
STOP	Surgical termination of pregnancy
TAUS	Transabdominal ultrasound
TVUS	Transvaginal ultrasound
USS	Ultrasound scan

YS	Yolk sac

1. INTRODUCTION

1.1 The RCOG evidence-based clinical guideline 'The Care of Women Requesting Induced Abortion' states that while routine ultrasound is not required before an abortion takes place, 'ultrasound scanning must be available to all services and may be part of the assessment'. PAS services are adequately resourced to undertake scanning routinely and it forms an essential part of the Gloucestershire Health and Care Services NHS Trust Pregnancy Advisory Service (GHC PAS) patient pathway.

2. PURPOSE

2.1 The policy provides guidance for the provision of ultrasound scanning within the pregnancy advisory service.

3. SCOPE

3.1 The policy applies to all staff providing scans within the PAS.

4. DUTIES

4.1 General Roles, Responsibilities and Accountability

Gloucestershire Health and Care NHS Foundation Trust (GHC) aims to take all reasonable steps to ensure the safety and independence of its patients and service users to make their own decisions about their care and treatment.

In addition **GHC** will ensure that:

- All employees have access to up to date evidence based policy documents.
- Appropriate training and updates are provided.
- Access to appropriate equipment that complies with safety and maintenance requirements is provided.

Managers and Heads of Service will ensure that:

- All staff are aware of, and have access to policy documents.
- All staff access training and development as appropriate to individual employee needs.
- All staff participate in the appraisal process, including the review of competencies.

Employees (including bank, agency and locum staff) must ensure that they:

- Practice within their level of competency and within the scope of their professional bodies where appropriate.
- Read and adhere to GHC policy
- Identify any areas for skill update or training required.
- Participate in the appraisal process.
- Ensure that all care and consent complies with the Mental Capacity Act (2005) – see section on MCA Compliance below.

5. MENTAL CAPACITY ACT COMPLIANCE

5.1 Where parts of this document relate to decisions about providing any form of care

treatment or accommodation, staff using the document must do the following: -

- Establish if the person able to consent to the care, treatment or accommodation that is proposed? (Consider the 5 principles of the Mental Capacity Act 2005 as outlined in section 1 of the Act. In particular principles 1,2 and 3) Mental Capacity Act 2005 (legislation.gov.uk).
- Where there are concerns that the person may not have mental capacity to make the specific decision, complete and record a formal mental capacity assessment.
- Where it has been evidenced that a person lacks the mental capacity to make the specific decision, complete and record a formal best interest decision making process using the best interest checklist as outlined in section 4 of the Mental Capacity Act 2005 Mental Capacity Act 2005 (legislation.gov.uk).
- Establish if there is an attorney under a relevant and registered Lasting Power of Attorney or a deputy appointed by the Court of Protection to make specific decisions on behalf of the person (N.B. they will be the decision maker where a relevant best interest decision is required. The validity of an LPA or a court order can be checked with the Office of the Public Guardian) Office of the Public Guardian - GOV.UK (www.gov.uk).
- If a person lacks mental capacity it is important to establish if there is a valid and applicable Advance Decision before medical treatment is given. The Advance Decision is legally binding if it complies with the MCA, is valid and applies to the specific situation. If these principles are met it takes precedence over decisions made in the persons best interests by other people. To be legally binding the person must have been over 18 when it was signed and had capacity to make, understand and communicate the decision. It must specifically state which medical treatments and in which circumstances the person refuses and only these must be considered. If a patient is detained under the Mental Health Act 1983 treatment can be given for a psychiatric disorder.
- Where the decision relates to a child or young person under the age of 16, the MCA does not apply. In these cases, the competence of the child or young person must be considered under Gillick competence. If the child or young person is deemed not to have the competence to make the decision then those who hold Parental Responsibility will make the decision, assuming it falls within the Zone of Parental control. Where the decision relates to treatment which is life sustaining or which will prevent significant long-term damage to a child or young person under 18 their refusal to consent can be overridden even if they have capacity or competence to consent.

6. POLICY DETAIL

6.1 Uses of Ultrasound

The principal uses of ultrasound within the GHC PAS are to:

- Determine gestational age
- Confirm an intrauterine pregnancy
- Localise the placenta for second trimester scans (to ensure the placenta is not low lying, especially if the surgical termination will be carried out in a community hospital)
- Detect multiple pregnancy
- Assess viability when indicated or in cases of suspected miscarriage

- Detect uterine anomaly or pathology that may increase the risks of abortion procedures
- Detect adnexal pathology (any cyst greater than 5cm should be followed up with GP in 8-12 weeks' time. A simple fluid filled cyst less than 5cm is usually an incidental finding and requires no routine follow up if asymptomatic)
- Aid in visualising removal of gestational sac or fetal parts during a surgical abortion
- Confirm that the pregnancy has been completely evacuated following a medical or surgical abortion.

6.2 Limitations and Further Opinions

- Practitioners should be fully aware of their own limitations and the limitations of ultrasound examination.
- In cases of difficulty, a second opinion should be sought from a more experienced colleague or by referral to EPAU.

6.3 Patient Information

The information provided to patients should explain:

- The purpose of the ultrasound scan (e.g. to determine gestational age, confirm intrauterine pregnancy)
- The indication for ultrasound. These include:
    - Unknown / uncertain date of last menstrual period
    - Having risk factors for or symptoms of ectopic pregnancy (e.g. unilateral abdominal pain, vaginal bleeding)
    - Recent use of hormonal contraception including emergency contraception
    - A history of 2 or more caesarean sections
    - Patients requesting/requiring MVA or GA STOP
    - The need for a re-scan if the patient's most recent USS was over 4 weeks ago.
- The scan will initially be through the abdomen so the patient should not empty their bladder for 2 hours prior to the appointment (it may be unhelpful to drink a specified amount, as this tends to result in the bladder being over distended and uncomfortable during the scan, particularly if the patient is kept waiting).
- If the pregnancy cannot be clearly seen through the abdomen, we will ask consent to do a vaginal scan and the patient will be asked to empty their bladder completely before this.
- If the patient is less than 5 weeks pregnant, then it may be too early to see any sign of pregnancy on scan. High sensitivity pregnancy tests are very sensitive and will be positive before any period is missed and around 2-3 weeks before the earliest sign of any pregnancy on scan.
- If the patient requests/requires a scan EMA, STOP or MVA, we will not be able to safely provide these procedures until we can confirm the pregnancy is located within the uterus. If the pregnancy test is positive but there is no sign of the pregnancy on scan, then from the history we will assess whether it is most likely too early (i.e. less than 5 weeks) or whether this may be a failed pregnancy or an ectopic pregnancy.
- If it is likely too early the patient will be asked to return in around 7-10 days for a further scan to confirm an intrauterine pregnancy. If they have symptoms that may suggest ectopic pregnancy including pain and or bleeding, they will be referred for

assessment in the Early Pregnancy Assessment Unit (EPAU).

6.4 The Scan Procedure and Objectives

- There is a general consensus that ultrasound in the first trimester should be performed transvaginally, due to closer positioning of the transducer and the greater resolution possible. However, in a busy clinical setting this needs to be balanced against the adequacy, greater convenience, and acceptability of transabdominal ultrasound. The most important objectives in the PAS are locating and dating an early pregnancy, and these objectives can be achieved in most cases using the transabdominal route. It is entirely reasonable to adopt a pragmatic approach and perform a routine transabdominal ultrasound (TAUS) scan, and then selectively ask patients to proceed to a transvaginal ultrasound (TVUS) scan where the findings are uncertain or to better clarify unexpected pathology. Proceed to TVUS in all pregnancies under 8 weeks where:
    - The pregnancy is not seen clearly in continuation with the line of the uterine cavity in longitudinal section, or
    - If the patient has had previous Caesarean sections and there is any doubt about the location of the pregnancy in relation to the C section scar.
- The person performing the scan is responsible for ensuring dignity and privacy for the patient at all times. This includes drawing the curtain where a TVUS scan is performed, ensuring privacy during dressing/undressing, and providing a cover sheet to the patient.
- Where a recent scan has been undertaken in the Acute Trust it may be unnecessary to rescan the patient provided the scan report is available. It is essential the date of any scan is noted, and the dating adjusted appropriately in planning any procedure.

6.4.1 Equipment

- There are two machines in the PAS clinical area (Toshiba Aplio 300 and Aplio 450) both of which have a transabdominal (TA) and a transvaginal (TV) transducer and provide an image quality adequate for the scope of pregnancy advisory work. There is a schedule of annual maintenance.
- Prior to switching the system on, a visual inspection of the main cart, keyboard, leads and the transducers is made for any sign of damage. When the ultrasound system is switched on, it goes through a boot up procedure, which initialises the system and performs internal control checks. The member of staff starting the machine is responsible for observing its ‘behaviour’ during boot up, looking out for unusual noises/error messages/smells, which may indicate a fault.

6.4.2 Patient Demographics

- These are entered before the start of each new examination and include the patient’s full name, DOB and NHS number (the GUM number should not be used). The name of the clinician performing the scan should be selected from the drop-down box provided or their initials entered next to the patient’s NHS number. The details are confirmed with the patient before commencing the scan.

6.4.3 Infection Control

- The acoustic coupling gel is wiped off the transducer after each use using a soft

single use cloth or wipe. Between each patient the transducer is cleaned with a microbicidal wipe approved for this purpose. Between uses, transducers are always stowed in the appropriate holder, which is an integral part of the machine.

- Prior to use the transvaginal probe is covered with an approved vaginal probe cover. Sterile acoustic coupling gel is applied inside and outside the probe cover. Single use gel sachets are to be used on the outside of the probe. After use the probe cover should be removed and disposed of in the orange bin, gloves should then be changed before the residual gel is removed with a dry cloth or wipe. The Trophon machine is used to clean the transvaginal probe and a log is maintained to record each disinfection cycle.
- General principles for the safe use of ultrasound gel:
    - For both sterile and non-sterile ultrasound gel:
        - ✓ Carry out hand hygiene before and after use of ultrasound gel
        - ✓ Ensure gel is stored according to manufacturer's instructions in an area that is dry and away from potential sources of contamination
        - ✓ Dispose of a gel container if it appears soiled, is damaged or is out of date.
    - For sterile ultrasound gel:
        - ✓ Ensure that only unopened sachets and containers that are labelled as 'sterile' are used
        - ✓ Do not reuse the container or sachet once opened, either with the same patient or other patients, as sterile gels are for single use only.
    - For non-sterile ultrasound gel:
        - ✓ Do not decant gel from a larger container into other bottles
        - ✓ Use single use sachets or pre-filled, multi-patient disposable bottles
        - ✓ Ensure pre-filled disposable bottles are not re-filled
        - ✓ Once opened, date the bottle and dispose of it when either empty, after one month or on expiry date, whichever comes first. Staff should therefore be marking the date on gel bottles when they are first opened
        - ✓ Clean the whole bottle, including the tip, with a disinfectant wipe between uses
        - ✓ Ensure the bottle is stored upright and the tip/nozzle of the bottle does not come into contact with anything; if it does, clean immediately with a disinfectant wipe
        - ✓ After the procedure remove all residual gel from the patient's skin and advise patients to wash the area when feasible.

6.5 Gestational Age Limits by Ultrasound: Clinical Directive

- The upper gestational age limit for Clause C abortion is 23 weeks and 6 days as per The Department of Health's interpretation of the Abortion Act.
- Head circumference is considered to be a more accurate measurement to ascertain gestation at higher gestations and is the preferred measurement to be used by staff after 13 weeks gestation.
- Where composite measurements have been used to determine gestational age on a scan from an external provider, whether the gestational age exceeds the upper limit should be determined by counting forward from this composite measurement.

- Any patient determined to be over the upper gestational age limit must have their scan finding corroborated. This may be done by another scan-accredited individual within the PAS or by the ultrasound department within the Acute Trust if this can be arranged. Every effort should be made to avoid unduly delaying patients from receiving confirmatory scans.
- Where a patient is to be refused treatment, the doctor or nurse who refused treatment must see the patient. The subsequent discussion must be fully documented in the electronic patient record including plans for onward referral. Referral should be made to the GP or community midwife so that antenatal care can be arranged.
- If the gestational age is over the limits for treatment within the GHC PAS but less than 24 weeks, then the patient should be supported to access care from alternative providers; BPAS or MSI.

6.6 Assessment Scan

- A systematic approach to scanning the pelvis, rather than simply targeting the pregnancy, is important to make sure the pregnancy is intrauterine. A full set of clearly labelled images must be filed in the patient's paper notes as these may be reviewed by the surgeon at the time of treatment.

  (1) Enquire about whether the patient wants an explanation of the ultrasound findings (e.g. gestation, single or multiple pregnancy); provide if requested.

  (2) The screen should be positioned in such a way that the patient cannot see it unless they have requested to see the scan.

  (3) For an abdominal scan, the patient should have a full bladder; for a vaginal scan the patient should empty their bladder prior to scanning.

  (4) Position the patient appropriately and comfortably for the type of scan being performed:

  (a) For TVUS consider using a wedge to allow movement of the probe
  (b) Ensure a comfortable position for the scanner and consider correct ergonomics to minimise the risk of repetitive strain injury.

  (5) Sweep across the uterus in the longitudinal plane from right to left and then turn the probe 90 degrees anticlockwise to obtain a transverse section, sweep through the uterus up and down from the cervix to the fundus.

  (6) Adjust the machine settings as appropriate to optimise the image.

  (7) At low magnification, identify the uterus in the longitudinal section, ensure visualisation of the gestation sac within the uterine cavity at the fundus. This image should be stored, printed, and filed in the patient's paper notes.

  (a) For abdominal scans, the bladder should be visible in the image frame with the uterus visible behind it.
  (b) Adjust depth setting to ensure that the entire uterus is seen to the level of the fundus and beyond.
  (c) For vaginal scans, the cervix should be visible in the image frame. If the entire cervix is not clearly visible in the low magnification longitudinal section of the uterus a second image to demonstrate the cervix should be included. This image is particularly important where a gestational sac is

not visible on ultrasound and should not be omitted in these cases.

(8) Use appropriate pre-sets and measurements to determine gestational age (recommended BMUS charts are programmed into the ultrasound machine)[1]

(a) Gestational sac only or gestational sac with yolk sac only:

- The mean sac diameter (MSD) should be determined. By convention the length and height of the sac are measured on a longitudinal image and the width is measured on a transverse image. Add these measurements and divide by 3 or calculate using machine pre-sets if available.
- The MSD (in mm) + 30 gives the approximate gestational age in days.
- When measuring the gestational sac, it is advisable to remember the appropriate landmarks which should be visible by certain gestational ages, failure to visualise these landmarks should raise concern about an abnormal intrauterine pregnancy or ectopic pregnancy.

(b) Fetal pole or crown-rump length (CRL)

- The embryo is measured in the longest dimension.
- Do not include the yolk sac in the measurement.
- If the CRL measurement is not working on the ultrasound machine, use a CRL chart.

(c) Head circumference (HC):

- A cross sectional view of the fetal head should be obtained at the level of the ventricles.
- The following landmarks should be identified:
  - ✓ Rugby football shape.
  - ✓ Centrally positioned, continuous midline echo broken at one third of its length by the cavum septum pellucidum.
  - ✓ Anterior walls of the lateral ventricles centrally placed around the midline.
  - ✓ The choroid plexus should be visible within the posterior horn of the ventricle.

- Callipers should be placed on the outer border of the occipital and frontal edges of the skull at the point of the midline.

(9) With the exception of mean sac diameter, the single best image should be used for gestational age calculation; taking the average of multiple images is not acceptable.

(10) The best image (or images if mean sac diameter is measured) from which gestational age is determined should be stored, printed, and filed in the patient's paper notes.

(11) If a yolk sac is visible within the sac, but this image does not represent the greatest diameter, an additional image which clearly shows the yolk sac should be stored, printed, and filed in the patient's paper notes.

(12) Where multiple gestations are present the appropriate measurement should be taken on each gestation sac or fetal pole independently. In very early pregnancy multiple pregnancy should not be diagnosed until separate embryonic heartbeats are visualised. The pregnancy is dated according to the

gestation of the largest fetus.

(13) Where a gestation sac is not seen:
  (a) A vaginal ultrasound is recommended.
  (b) Images clearly demonstrating the uterus should be printed at low and high magnification; ensure that the entire uterus has been visualised from cervix to fundus.
  (c) Neither medical nor surgical abortion should be initiated.
  (d) An assessment of the patient's risk for ectopic pregnancy must be performed - see section on pregnancy of unknown location.

(14) For patients with a history of caesarean section:
  (a) Staff must have a high index of suspicion for scar or cervical implantation in patients with prior caesarean deliveries. For patients with two or more caesareans check for scar ectopic before offering early medical abortion at home. Where there is concern of a scar or cervical implantation the patient must be referred to EPAU for further assessment.
  (b) from 12 weeks gestation placental location must be determined prior to treatment. If this cannot be undertaken at consultation, rebook the patient when a senior doctor will be available.

(15) Both adnexa should be examined.

(16) Ensure images are clearly labelled, printed, and filed in the patient's paper notes.

(17) Record findings in the electronic patient record.

(18) Revert screen to main patient search page before the patient is advised to leave the examination couch. This is to ensure images are not inadvertently visible to the patient.

(19) Clean the ultrasound transducer as appropriate.

(20) The Information Governance lead has confirmed that if a patient requests a copy of the scan image during their consultation, this can be provided as you are able to confirm the patient's identity. Give them a copy of the photo or enable them to take an image on their phone and document this in their notes. We do not charge patients for any copies of scan images provided.

6.7 Ultrasound Report

The findings should be documented in the electronic patient record. The following information should be included:

- The name of the clinician undertaking the scan.
- The route/s of examination, patient consent, and details of any chaperone.
- The date of the examination.
- For early pregnancy the uterine findings (version/flexion any fibroids etc.), the position of the gestation sac, the presence of a yolk sac, the presence of a fetal pole, and the presence or absence of a fetal heartbeat.
- For later pregnancy (after 12 weeks) the position of the placenta, in particular its relationship to any caesarean scar and whether it is covering the cervix.
- Appropriate measurements:

    - If too early for CRL, the mean sac diameter (MSD)
    - CRL at 6-13 weeks
    - HC at 13 weeks and above.
- Where multiple pregnancy is identified, the chorionicity (presence of Lambda or T sign), the fetal number and whether two heartbeats were identified.
- The best estimate of dating (weeks and days).

6.8 Non-Routine Findings

Considerable controversy has surrounded the diagnosis of non-viable early pregnancy. In most pregnancies, a yolk sac will be visible when the gestation sac measures 8mm, a fetal pole or embryo will be visible by the time the sac is around 16mm and cardiac pulsations will be visible by the time the embryo measures 5mm. In a minority of 'viable' pregnancies the appearance of the yolk sac, the embryo, or cardiac pulsations has been shown to fall beyond these limits. The RCOG changed its guidance on diagnosis of miscarriage to a threshold of an empty gestation sac with MSD greater than 25mm or no cardiac activity present in an embryo of 7mm or more [(2)]. Where these diagnostic thresholds are not met but an embryonic heartbeat is not seen, the pregnancy is of uncertain viability (PUV). In 2012, the UK National Institute for Health and Care Excellence adopted the recommendations of the Royal College of Obstetricians and Gynaecologists [(3)]. This guidance recommends interval rescanning where these diagnostic thresholds are not met. In the PAS it is appropriate to explain the possible interpretations and establish the patient's preference for either proceeding to termination without delay, or referral to EPAU for further management. Unless the patient is ambivalent or expresses a desire to know the viability of the pregnancy then it is not necessary to confirm viability before booking treatment.

6.8.1 Pregnancy of Unknown Location (PUL)

- Where no pregnancy is seen on TAUS always seek consent to do a TVUS scan. If a TVUS scan is declined, then it is important to explain the indication to exclude ectopic pregnancy and document that the patient understands this but still declines.
- A risk assessment for ectopic is made including symptoms of pain or bleeding and predisposing factors e.g. previous ectopic, history of pelvic inflammatory disease, tubal surgery, and pregnancy with an intrauterine device in situ.
- A high sensitivity pregnancy test is performed. If the pregnancy test is positive and there is no pregnancy identified on TVUS scan and the patient has symptoms suggestive of ectopic pregnancy or miscarriage, they should be referred to the EPAU for further assessment. A blood sample for serum HCG and progesterone level should be sent and safety netting advice given to the patient, together with written information.

6.8.2 Ectopic Pregnancy

- If an ectopic pregnancy is suspected, then referral should be made to the gynaecology registrar/consultant and immediate transfer to GRH arranged (via ambulance if there is evidence of haemoperitoneum or the patient is haemodynamically unstable). Haemodynamically unstable patients require intravenous fluids while awaiting ambulance transfer.

6.8.3 Interpretation of HCG

- The initial HCG taken in the PAS is to aid further diagnosis and treatment when the patient is seen in the EPAU. If the HCG level is above 1000 and the uterus empty on TVUS scan this should raise the level of suspicion for an ectopic pregnancy and indicates a need for urgent review and assessment. Note that the EPAU is not a 24-hour service and therefore any patients requiring urgent review and assessment should be discussed with the gynaecology registrar/consultant on-call.

6.8.4 Gestational Trophoblastic Disease

- Gestational trophoblastic disease including molar pregnancy occurs with a frequency of 1 in 714 live births in the UK [(4)]. The ultrasound appearance in early pregnancy is not as striking as in mid-trimester pregnancy, but the presence of large abnormal looking placental tissue with multiple small cystic spaces should raise a suspicion of the diagnosis. Diagnosing molar pregnancy is important because after the mole has been evacuated from the uterus these patients must have careful follow up to exclude subsequent development of a choriocarcinoma or persistent trophoblastic disease.
    - If a complete or partial molar pregnancy is known or suspected prior to the evacuation, the patient should be informed and referred to the EPAU for further assessment and management. It is important to document the suspicion of molar pregnancy in the EPAU referral and stress the need for careful follow-up to the patient.
    - If a complete or partial molar pregnancy is suspected at the time of an evacuation, it is acceptable to complete the procedure, but every effort should be made to collect the tissue so that it may be sent for histological examination. Prior to discharge, the surgeon will explain the findings to the patient including the need for careful follow-up.
    - In both situations, the purpose and importance of histology will be explained to the patient and the patient's consent to send the products of conception for histological examination sought and documented in the electronic patient record.

6.8.5 Management Following Diagnosis of Failed Pregnancy

- Where failed pregnancy is diagnosed, the patient should be referred to the EPAU for further management. Risks of haemorrhage and infection should be discussed, and emergency advice given.

6.9 Ultrasound in the Management of Abortion Complications

- Patients who have already had a termination (early medical termination at home or surgical termination) may require a rescan and review in the PAS clinic if they have any of the following symptoms:
    - Abnormal vaginal bleeding
    - Abnormal discharge
    - Lower abdominal pain
    - Positive low sensitivity pregnancy test at 3 weeks following an EMAH
    - Less than expected bleeding following EMAH
    - Patient thinks products of conception have not passed.
- The commonest complication following termination is prolonged bleeding. The range of duration of bleeding is very wide. Around 5 in 100 patients request a follow

up due to physical symptoms following an early medical abortion and around 1-2 in 100 following a surgical termination. In a proportion of medical cases the concern is due to persistence of a positive pregnancy test at or beyond 3 weeks after their procedure.

- Patients with prolonged bleeding or a prolonged positive pregnancy test are offered a scan, however assessment of the patient should be based on the patient's signs and symptoms in conjunction with the scan findings. The commonest finding with prolonged bleeding and/or a persistent positive pregnancy test is a small amount of clot or retained products of conception (RPOC), occasionally with high myometrial flow extending into the RPOC. The main purpose of the scan is to reassure that the pregnancy is not continuing and that there is no intact retained gestation sac. If these are excluded, it is debatable whether and what further treatment is indicated unless there is suspicion of infection causing prolonged bleeding. The scan findings 3-6 weeks post EMAH can be thin endometrium, thick endometrium, some high flow, and clot/debris/tissue. All of these confirm the procedure has been successful and rarely need anything apart from time for resolution.
- Medical management with misoprostol and consideration of a course of antibiotics can be offered. Where a larger volume of RPOC remain then surgical evacuation is likely to be the fastest and most convenient means to resolution, but if the patient declines, then further misoprostol and antibiotics may shorten the time interval to return to normal. Re-instrumentation of the uterus (i.e. prior surgical termination) or prolonged retention of products of conception increases the risk of associated infection and antibiotics should be commenced prior to surgical evacuation. With conservative management the time to resolution can take several weeks.
- See appendix 1 (guideline for the management of patients attending for rescan and review following early medical abortion).

6.10 Image Archiving

- The scan equipment used in Hope House is not linked to any PACS system and this would not be appropriate due to the requirement for a high level of confidentiality for patients attending the service. However, all images are archived by the process of being downloaded from the machines and uploaded to a secured network drive. Once the download has been confirmed, the images are deleted from the machines.

7. PROCESS FOR MONITORING COMPLIANCE

Are the systems or processes in this document monitored in line with national, regional, trust or local requirements?	YES

Monitoring Requirements and Methodology	Frequency	Further Actions
Audit of 50 PAS scans for: • Required patient demographics entered • Type of scan (TA or TA+TV) appropriate • Image storage includes an overview image, appropriate measurements with appropriate magnification and adnexal views • Reporting appropriate (as per section 6.7 'Ultrasound Report')	Annually	The results will be shared with all staff providing ultrasound scans within the PAS. Areas for improvement will be discussed, reasons for low compliance explored and changes implemented.

8. INCIDENT AND NEAR MISS REPORTING AND REGULATION 20 DUTY OF CANDOUR REQUIREMENTS

8.1 To support monitoring and learning from harm, staff should utilise the Trust's Incident Reporting System, DATIX. For further guidance, staff and managers should reference the Incident Reporting Policy. For moderate and severe harm, or deaths, related to patient safety incidents, Regulation 20 Duty of Candour must be considered and guidance for staff can be found in the Duty of Candour Policy and Intranet resources. Professional Duty of Candour and the overarching principle of 'being open' should apply to all incidents.

9. TRAINING

9.1 An internal process for training and assessment of competence is based on relevant sections of the Faculty of Sexual and Reproductive Healthcare Ultrasound Special Skills Module. Other training pathways include accredited ultrasound short courses e.g. the AECC University College Basic Gynaecology and Early Pregnancy Ultrasound course.

9.2 Trainees have a full understanding of the safety aspects of ultrasound, the controls of the machines including selection of appropriate pre-sets, and the examination including infection control. They are trained how to optimise the image and understand when transvaginal scanning is necessary to complement the abdominal examination. Throughout their training, staff learning to scan are directly supervised by a senior practitioner. Each trainee keeps a log of scans performed and the findings. As a relatively small number of patients attending the PAS are outside the first trimester, in order to gain competence at dating later pregnancies the trainees attend a number of sessions with an obstetric sonographer in GHNHSFT.

9.3 Once they have demonstrated competence at routine early pregnancy assessment, they move to the next level of indirect supervision with an experienced practitioner in the clinic checking stored images at the end of the session and providing direct supervision where any scan is more difficult, or the findings are not routine.

9.4 When the trainee has completed their qualification and their trainer is satisfied the trainee can consistently fulfil the aims below, they are signed off for independent practice. These aims are that the trainee can:

- Reasonably perform, interpret, and report the range of scan findings encountered in the PAS clinics, including reliable dating measurements, and reporting non-routine findings.
- Consistently select the appropriate route of scanning and optimise the image.
- Communicate appropriately with the patient.
- Recognise their limitations and ask for advice appropriately, referring on cases they are not competent to manage to a more experienced practitioner.

9.5 All newly qualified practitioners have a mentor or system of peer review to discuss difficult cases and review images.

9.6 All ultrasound practitioners are required to engage with relevant CPD to demonstrate

they remain up to date. This should be supported by the PAS.

10. REFERENCES

(1) *Loughna O, Chitty L, Evans T, Chudleigh T. Fetal size and dating: charts recommended for clinical obstetric practice. Ultrasound 2009; 17: 161-7*

(2) *Royal College of Obstetricians and Gynaecologists. Addendum to GTG No 25 (Oct). The management of early pregnancy loss. RCOG Press; 2011*

(3) *NICE (National Institute for Health and Care Excellence). Clinical Guideline NG126. Ectopic pregnancy and miscarriage: diagnosis and initial management. 2019*

(4) *Royal College of Obstetricians and Gynaecologists. The Care of women requesting induced abortion. Evidence based guideline number 7. November 2011 https://www.rcog.org.uk/globalassets/documents/guidelines/abortion-guideline_web_1.pdf*

11. ASSOCIATED DOCUMENTS

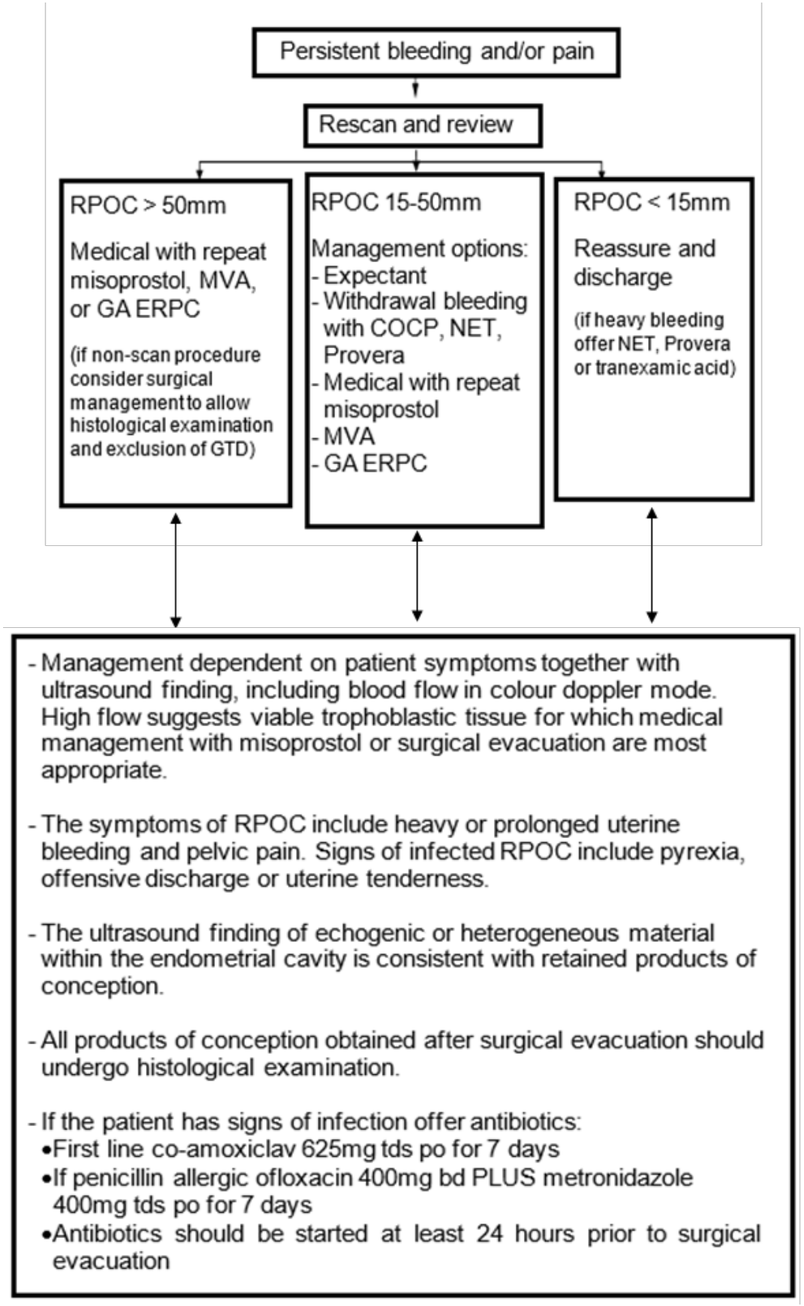
Infection Prevention and Control Policies and Guidelines

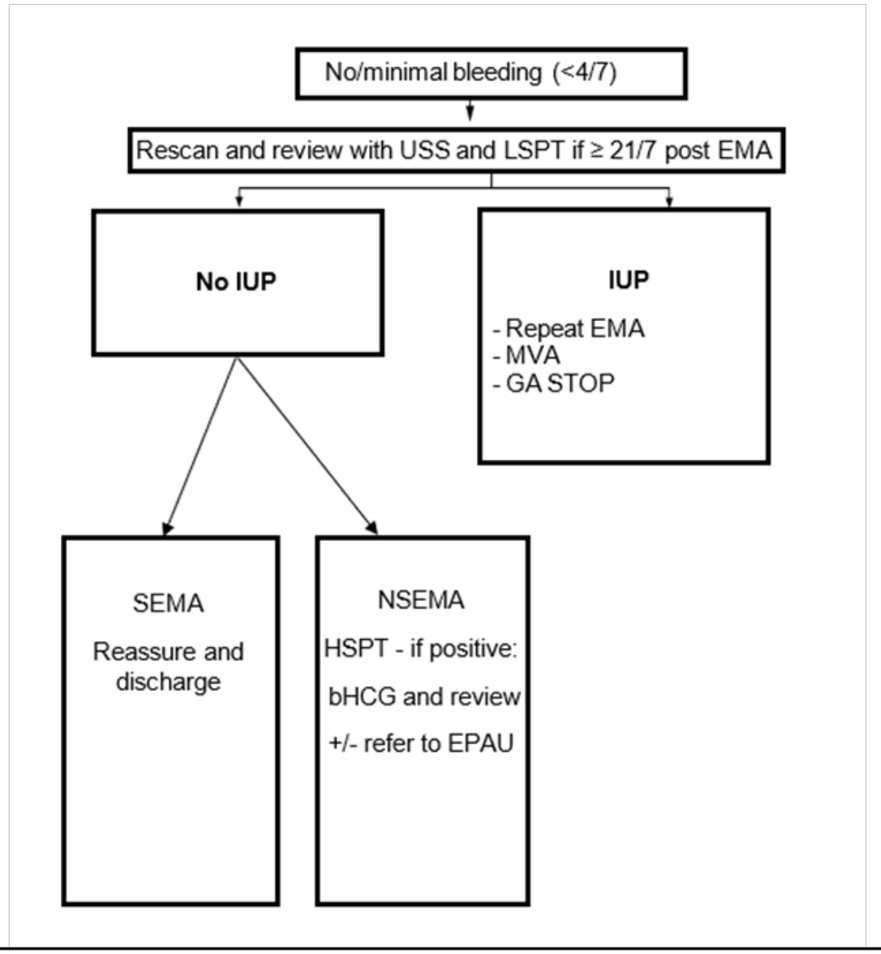
Chaperones (Clinical Guideline CLG013)

Pregnancy Advisory Service: Termination of Pregnancy (Clinical Policy CLP135)

Information Governance Policies

Appendix 1. Guideline for the management of patients attending for rescan and review following early medical abortion[a]





[a] COCP = combined oral contraceptive pill, EMA = early medical abortion, EPAU = early pregnancy assessment unit, ERPC = evacuation retained products of conception, GA = general anaesthetic, GTD = gestational trophoblastic disease, HSPT = high sensitivity pregnancy test, IUP = intrauterine pregnancy, LSPT = low sensitivity pregnancy test, MVA = manual vacuum aspiration, NET = norethisterone, NSEMA = non-scan early medical abortion, RPOC = retained products of conception, SEMA = scan early medical abortion, USS = ultrasound scan