The Shrewsbury and Telford Hospital NHS
NHS Trust

Medical Management of Miscarriage First Trimester

Version 3.2

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Comments	:	References to SaTH Guidelines in the text pertain to the latest version of the Guideline on the intranet. Printed copies may not be the most up to date version.

For Triennial Review

Version	Implementation Date	History	Ratified By	Full Review Date
1	24th June 2011	New		June 2014
2	4th February 2014	Reviewed following updates to NICE guidance	Gynae Governance	Feb 2017
2.1	3rd July 2015	2nd trimester in separate guideline	Gynae Governance	Feb 2017
2.2	7th March 2018	Reviewed by A Keene, no changes, date renewed	Gynae Governance	Mar 2023
3.0	June 2023	Full review and update including clarification on inpatient and outpatient medical management of miscarriage	Gynae Governance	June 2026
3.1	29th January 2024	Addition of Mifepristone for missed miscarriage (NICE). Update for women at risk of rupture.	Gynae Governance	June 2026
3.2	17th June 2024	Update to definitions of types of miscarriage and follow up actions	Gynae and Fertility Clinical Governance	June 2026

1.0 Introduction

In this guideline we use the terms 'woman' throughout. These should be taken to include people who do not identify as women but are pregnant or have given birth.

1.1 Following the scan diagnosis of non-viable pregnancy or retained products of conception, options offered to patients will include expectant, medical and surgical management as per guideline "Diagnosis and Management of Miscarriage".

1.2 Mifepristone is an anti-progesterone and will increase the success of medical management where a miscarriage has been diagnosed but the process of miscarriage has not begun (i.e no symptoms).

2.0 Aims

2.1 To ensure optimum care is given.

2.2 To provide a framework for appropriate management.

3.0 Objectives

3.1 To provide a framework for management of women who have chosen medical management of miscarriage to ensure consistency and safety.

3.2 To provide psychological and emotional support

4.0 Indications

4.1 Missed (Silent) Miscarriage

- Defined as the presence of non-viable intra-uterine pregnancy with no symptoms (or minimal symptoms)
- Non-viability should be clearly diagnosed in accordance with the criteria specified in the guideline "Diagnosis and management of miscarriage."
- Medical management can be used at any gestation and is the preferred option in the late first trimester or second trimester.
- Consideration should be given to inpatient management for women at high risk of bleeding, and those with a gestation over 10weeks on scan.

4.2 Incomplete Miscarriage

- Defined as the presence of pregnancy tissue where the miscarriage process has already begun (already symptomatic).
- Medical management is more likely to be successful for RPOC following a recent miscarriage.
- It is less likely to be successful for chronic RPOC or small amounts of tissue.

5.0 Process

5.1 Contraindications to Medical management

- Pelvic infection or sepsis
- Haemodynamic instability or shock
- Allergy to Mifepristone/Misoprostol as appropriate
- Known bleeding disorder.
- Severe uncontrolled Asthma
- Concurrent anticoagulant therapy
- Confirmed or suspected ectopic or molar pregnancy
- Anaemia <90g/L (Relative contraindication)
- History of Cardiovascular and Cerebrovascular disease

Women with IUCD should have them removed before Misoprostol is administered.

5.2 Side Effects

- Diarrhoea
- Abdominal pain
- Dyspepsia
- Nausea/vomiting
- Skin rash
- Dizziness
- Fever and Chills

5.3 Outpatient Management Miscarriage

5.3.1 Criteria

- Determine suitability for **outpatient** management of miscarriage using the following criteria prior to booking.
    - Age >18 years and Gestation <10 weeks on scan (CRL <33mm), empty sac <50mm or RPOC <50mm (Consider at 10-12 weeks on scan on an individual basis with appropriate counselling on risks associated)
    - No other major health condition which the clinician believes would increase the risk of management of miscarriage in the outpatient setting.
    - No more than two Caesarean sections
    - No history of extensive uterine surgery (eg myomectomy)
    - No history of bleeding disorders
    - Hb >100g/L
    - No contraindications for Misoprostol
    - No active heavy bleeding
    - A responsible adult at home and within an easy reach to the hospital

  Any patient requesting outpatient management outside of these criteria should be discussed with the consultant on call.

5.3.2 Drug Regime

- For the medical management of missed (silent) miscarriage as defined in 4.1 offer:
    - 200 mg oral mifepristone and
    - 48 hours later, 800 micrograms misoprostol (vaginal, oral or sublingual) unless the gestational sac has already been passed.
- For incomplete miscarriage prescribe 800mcg without mifepristone.
- Consider reduced dose for women at increased risk of uterine rupture (see section 5.6)
- Misoprostol can also be given orally where the woman prefers however this will have higher rates of gastrointestinal side effects.
- Offer all women receiving medical management of miscarriage pain relief and anti-emetics as needed.

5.3.3 Process

- Advise patients to attend the EPAS at 08:00 hours OR 13:30 hours depending on slot availability.
- On arrival at EPAS, a brief medical history as well as admission details

should be taken by the EPAS nurse to ensure patient remains suitable for outpatient care.

- Patient observations should be taken (full EWS).
- Check result of FBC (Hb) and ensure valid group and save (FBC should have been taken at the time of diagnosis of miscarriage to determine suitability for outpatient management if no recent results prior to miscarriage)
- Offer patients information regarding miscarriage management such as the Miscarriage Association's Management of Miscarriage options leaflet and/or SaTH's Miscarriage Leaflet if not already received. Allow time to consider options if patient is not certain.
- Patients should be given a Card containing EPAS contact numbers and numbers for follow up support.

- Details of the procedure, risk factors and side effects of management should be discussed, and an informed consent obtained by the doctor.
- A doctor should offer (and prescribe if accepted (FP10)) analgesia and anti-emetic if necessary and no allergies.
    - Codeine phosphate 30-60mg up to four times a day
    - Cyclizine 50mg TDS as required for three days.

- Advise patient to purchase standard paracetamol/ibuprofen.
- A doctor should then prescribe the appropriate medication on a standard prescription chart to be given by the vaginal route if the patient accepts this route.

- Cremation, histology, and parental wishes forms should be completed by a clinician.
- Medical management of Miscarriage Care Pathway and History Form should be completed by the EPAS nurses.
- An EPAS nurse should then administer the misoprostol as prescribed (PV or PO)
- Advise patient to remain in the couch for 30 minutes after the administration of the medication when used vaginally – offer pain relief at time of administration.
- If remains well then patient can be discharged home after 30 minutes with appropriate advice.

5.3.4 Follow up during outpatient management.

- Advise patients that they are likely to experience heavy vaginal bleeding for a short time associated with cramps, and to take the analgesia as required.
- Advise patient to contact EPAS for prompt assessment at either EPAS, GATU or the Gynaecology ward if:
    - Severe unbearable pain
    - Very heavy bleeding soaking more than one thick sanitary towel per hour
    - Symptoms or signs of infection – high fever, offensive discharge

- Advise the woman or person that if bleeding has not started within 48 hours after misoprostol treatment, they should contact EPAS to determine ongoing individualised care. If there are concerns that they will not contact the service then EPAS will contact the patient instead.

- Options would include:
    - A further dose of misoprostol 400micrograms to be administered the next day
    - Adopting a purely expectant approach for 7-14 days
    - Surgical management
- Do not offer mifepristone as a treatment for incomplete miscarriage.

- If there is resolution of bleeding and pain, which indicates the miscarriage has completed during the 7 to 14 days of medical management, advise the woman to take a urine pregnancy test 3 weeks after commencing administering the misoprostol. Instruct the woman to contact EPAS if the pregnancy test is positive.
- All patients should receive a follow up telephone call after three (3) weeks to assess symptoms and treatment success (85% of women will complete miscarriage within two weeks) and to check pregnancy test result. Offer emotional support at this follow up appointment.
- If she has a negative pregnancy test and is asymptomatic, it indicates a successful management, and no further follow up is required (Discharge)
- If the pregnancy test after 3 weeks is negative but the woman is still bleeding heavily or has other symptoms (for example, pelvic pain or fever), then assess the need for further investigations or treatment.
- Anti D is not routinely required for women having medical management under 12 weeks unless they undergo surgical management as emergency (NICE 2023)
- Anti D 1500IU should be offered to Rhesus Negative patients if they undergo medical management of miscarriage over 12 weeks (NICE 2023)
- Signpost patients to Miscarriage support services/Charities such as Miscarriage association, 4-Loius or Cradle.

5.4.4 Unsuccessful outpatient Medical Management

- For the purposes of this guideline, unsuccessful medical management includes all women who, after 14 days:
    - Have not started bleeding at all.
    - Have had pain and bleeding but have evidence of retained pregnancy tissue.

- If positive pregnancy test after 3 weeks, Patient should be seen at EPAS for further assessment and have a repeat ultrasound scan.
- A scan should still be considered for women with a negative pregnancy test if she has symptoms consistent with retained tissue.
- Women with unsuccessful medical management should be seen by the medical team on call and have the following options discussed:
    - Expectant management
    - Further medical management
    - Surgical management of miscarriage
    - Hysteroscopy and myosure (for chronic small volume RPOC)

5.5 Inpatient medical management of miscarriage

All women who are not suitable for outpatient management as in the criteria above should be offered inpatient care. Some women may opt to have medical management in hospital if they prefer. Women over 10 weeks on scan (CRL >33mm) should be offered inpatient medical management of miscarriage.

5.5.1 Drug Regime

- For missed (silent) miscarriage women should be given Mifepristone 200mg and then a plan for admission made for 48 hours later.
- A doctor should prescribe Misoprostol, analgesia, and anti-sickness, as well as any regular medications on an appropriate inpatient prescription chart.
    - Misoprostol 800 micrograms as a vaginal dose
    - Misoprostol 400micrograms to be given as a vaginal dose after 3 hours if there has been no bleeding after the first dose.
    - Co-codamol 30/500 one to two tablets up to four times daily
    - Cyclizine 50mg TDS as required.

5.5.2 Process

- Ensure patient meets eligibility criteria for medical management.
- A doctor should complete the written consent for Medical Management of Miscarriage.
- Medical management of Miscarriage Care Pathway and History Form should be completed by the EPAS/Gynaecology nurses.
- An EPAS/Gynaecology nurse should complete the Sensitive disposal of foetal remains forms.
- A doctor should prescribe Misoprostol, analgesia, and anti-sickness, as well as any regular medications on an appropriate inpatient prescription chart as above.
- Gynaecology ward nurses should administer the Misoprostol as prescribed, as well as other prescribed medications as required.

- If the patient is <10 weeks (<CRL33mm) they can be discharged after 6 hours if well, even if no products have been passed so long as there is no concern about an increased bleeding risk (that is, patient was admitted purely because of concerns about misoprostol reaction/use).
    - Warn the patient that the miscarriage is likely to occur at home and advise a pregnancy test in 3 weeks. Ensure that she has contact details for the ward/EPAS.
    - Follow up as per the outpatient management above (section 5.4.3)
    - If the patient is under 10 weeks and prefers to remain in hospital until the miscarriage is complete further doses of Misoprostol can be given at a dose of 400micrograms every 3 hours to a maximum of 5 doses.
    - This should be discussed with the patient by a consultant.

- If there are medical concerns about the safety of a miscarriage at home (for example cardiac disease, bleeding tendency, on anticoagulants etc.), arrange senior review if the miscarriage has not completed within a total of 6 doses of misoprostol. Surgical management or further medical

treatment should be considered on an individualised basis.

- Consider sending products of conception for cytogenetics (POC and maternal blood sample in EDTA bottle in purple genetics request form) for women with three or more consecutive miscarriages and refer to Recurrent Miscarriage clinic.

5.5.2 Follow up after inpatient management.

- All women who have medical management of miscarriage as an inpatient should be given a pregnancy test to take after 3 weeks (a date should be given to the patient prior to discharge).
- If pregnancy test is positive, they should contact EPAS for review.
- EPAS telephone follow up on 3 weeks.
- EPAS should be informed of all women having inpatient management before discharge, especially those with any complications so that appropriate follow up support can be offered.

5.6 Women with increased risk of uterine rupture

Based on limited evidence (Chen 2008), women with 1 or 2 previous caesarean sections do not appear to be at an increased risk of uterine rupture following the use of mifepristone/misoprostol.

A reduced dose regime along with inpatient management should be considered in the following situations:

• Scarred uterus undergoing second trimester management of miscarriage (>14/40) - risk 0.3%
• Previous classical or T-shaped uterine incision or extensive transfundal uterine surgery
• Grandmultiparity (P≥5)
• ≥3 LSCS - there is no good evidence that even multiple previous LSCS poses a significant risk of rupture with the use of Misoprostol in the first trimester. However it may be prudent to be cautious and recommend a lower dose protocol with patients with ≥3 LSCS or a significant scar defect or reduced residual myometrial thickness on TV US.

In these scenarios it may be safer to offer inpatient management using an initial 400mcg dose of misoprostol, followed up by 200mcg misoprstol every 3 hours up to 5 doses.

6.0 Training

6.1 All staff receive continuous in-house training and receive regular updates from The Association of Early Pregnancy Units
6.2 All staff employed by SATH will be informed how to access guidelines on the intranet.
6.3 Information regarding new and updated guidelines is circulated by email/memo to medical and nursing staff.
6.4 A paper copy is placed in the Gynaecology Guideline Folder on Ward 14 and file in EPAS with a notice posted to alert staff to be aware of new and updated guidelines.

7.0 Monitoring

Compliance with this guideline / SOP will be audited as part of the Shrewsbury and Telford Hospital NHS Trust's five-year rolling programme of NICE and local guideline audits, unless circumstances require an earlier or more frequent audit. The audit will be carried out using the auditable standards and the results will be reported and acted on in accordance with the Trust Clinical Audit Policy (CG25).

Audit criteria

7.1 All women undergoing medical management of miscarriage have had non-viability confirmed as per NICE criteria.
7.2 All women receive counselling to include written information before commencement of medical management.
7.3 All women are offered analgesia and anti-emetics, and these are prescribed if accepted.
7.4 All women with failed medical management of miscarriage have a Tier 2 or 3 review and to discuss further management options.

8.0 References

NICE Clinical Guidelines 126 "Ectopic Pregnancy and Miscarriage – Diagnosis and Initial management" November 2021

Management of Miscarriage Guideline, Cardiff and Vale University Health Board accessed online at https://wisdom.nhs.wales/health-board-guidelines/c-vgguidelinefile/management-of-miscarriage-cvg-guideline-2022-pdf/

Chen BA, Reeves MF, Creinin MD, Gilles JM, Barnhart K, Westhoff C, Zhang J; National Institute of Child Health and Human Development Management of Early Pregnancy Failure Trial. Misoprostol for treatment of early pregnancy failure in women with previous uterine surgery. Am J Obstet Gynecol. 2008 Jun;198(6):626.e1-5. doi: 10.1016/j.ajog.2007.11.045. Epub 2008 Feb 15. PMID: 18279821; PMCID: PMC2519868.