

Miscarriage – Expectant, Medical & Surgical Management

Document Type	Guideline
Function	Clinical Service Delivery
Healthcare Service Group (HSG)	Women's Health
Department(s) affected	Gynaecology
Patients affected (if applicable)	Women who have had or may have a miscarriage
Staff members affected	All clinicians working in gynaecology
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1. Purpose of guideline

This guideline is designed to facilitate streamlined management of women within Auckland District Health Board (ADHB) who are experiencing a miscarriage. The supervising clinician may elect to vary the management on an individual basis.

Conservative management may be either expectant or medication (with misoprostol). With both approaches the goal is the same: an empty uterus without the use of surgery.

Surgical management is offered where a woman chooses to have surgical evacuation of the uterus under general anaesthetic.

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2. Diagnostic criteria

The diagnosis of early pregnancy failure or miscarriage should be made on standardised criteria using clinical and ultrasound findings in the presence of a positive pregnancy test. If the diagnosis is uncertain or the patient has no symptoms the scan should be repeated after 1 week.

RANZCOG definitions

Early pregnancy failure:

- Gestational sac with no fetus AND mean sac diameter > 25mm (anembryonic pregnancy/afetal sac/blighted ovum)
- Fetus present but no cardiac activity with crown-rump length \geq 7 mm (missed abortion) and/or poor or absent growth over 1 week of gestational sac and or fetus
- If the site of the pregnancy is unknown, it should be managed as a suspected ectopic pregnancy (refer Ectopic Pregnancy guideline)
- Formal diagnosis of early pregnancy failure or miscarriage should be made by an experienced clinician

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3. Diagnosis of a failed pregnancy (missed miscarriage)

Sonographers, registrars and sonologists performing antenatal ultrasound examinations must use the correct criteria regarding the diagnosis of missed miscarriage. Transvaginal ultrasound examination should always be performed for all first trimester ultrasound examinations for assessment of status of pregnancy.

Step	
1	A gestational sac – mean sac diameter (MSD) of 25mm or greater without a fetal pole with a visible heartbeat OR
2	A crown rump length (CRL) of a fetal pole at 7mm or greater without a visible heartbeat. The area of the fetal heart should be observed for a period of at least 30 seconds
3	As the diagnosis of a failed pregnancy cannot be made until the sac size is (or has failed to reach) 25mm, then it follows that the interval between scan is dependent on the MSD at initial presentation
4	A normal gestational sac grows at a rate of 1mm/day. Therefore a MSD of 12mm should be rescanned no earlier than 13 days. Using this rule, maternal anxiety should be reduced by avoiding repeated inconclusive scans and also decreases the number of unnecessary scans

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4. Baseline procedure and information

Anti – D

The use of anti Rh gamma globulin is to inactivate fetal Rh positive cells which might pass the placental barrier and enter the maternal circulation.

Anti-D Immunoglobulin is offered to Rh(D) negative women following a sensitising event and must be given within 72 hours.

A current group and hold is needed to confirm Rh factor.

250 IU can be used to provide protection for Rh (D) negative women following sensitising events during the first trimester of pregnancy. The exception is in multiple pregnancies where the standard 625 IU continues to be recommended.

Anti-D is a blood product and written consent is needed. To request Anti-D, fill in the blood components or product form and send it to the blood bank via Lamson tube.

Document in the patient's clinical record once Anti-D has been given.

Decision for treatment modality

Full counselling is given offering options of surgical vs. expectant vs. medication management and the risk vs. benefit associated with each option discussed.

Studies show a longer duration of bleeding with conservative management, but the haemoglobin drop is no different.

The pain of uterine emptying is covered by anaesthesia (which in itself has risks) in the case of surgical evacuation, whilst with conservative management, analgesia is often required.

Infection rates appear to be similar whichever regime is used.

Success is defined as an empty uterus without the need for secondary evacuation, and is probably higher after longer intervals. There is a 2 - 4% risk of incomplete evacuation with surgery.

Treatment options of early pregnancy failure (missed miscarriage/blighted ovum)

- Expectant management (wait and see)
- Surgical management (evacuation of the uterus under anaesthetic)
- Medical management (administration of misoprostol)

Incomplete miscarriage

Expectant management has an 80 - 90% success rate, therefore should be recommended as the first line of treatment for incomplete miscarriage. There is no physical advantage to surgical or medical management for incomplete miscarriage providing all criteria are met.

Information to woman about what to expect is crucial to the success of expectant management.

Any of the following patient presentations must be assessed and appropriate action taken:

- Haemodynamically unstable
- Acute abdomen
- Sepsis
- Abnormal FBC
- Empty uterus on scan
- Molar pregnancy
- IUCD in situ
- History of non compliance
- Lack of consent
- Breastfeeding
- Allergy to misoprostol
- Lack of phone
- Lack of transport
- Lack of English language

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5. Initial assessment discharge list

Initial assessment discharge checklist for BOTH expectant and medical management:

- FBC, Group and Antibody Screen, serum BHCG
- The patient has information leaflets regarding:
 - Managing Your Miscarriage at Home
 - Pregnancy Loss Service
 - Anti D (where applicable)

The patient has been given:

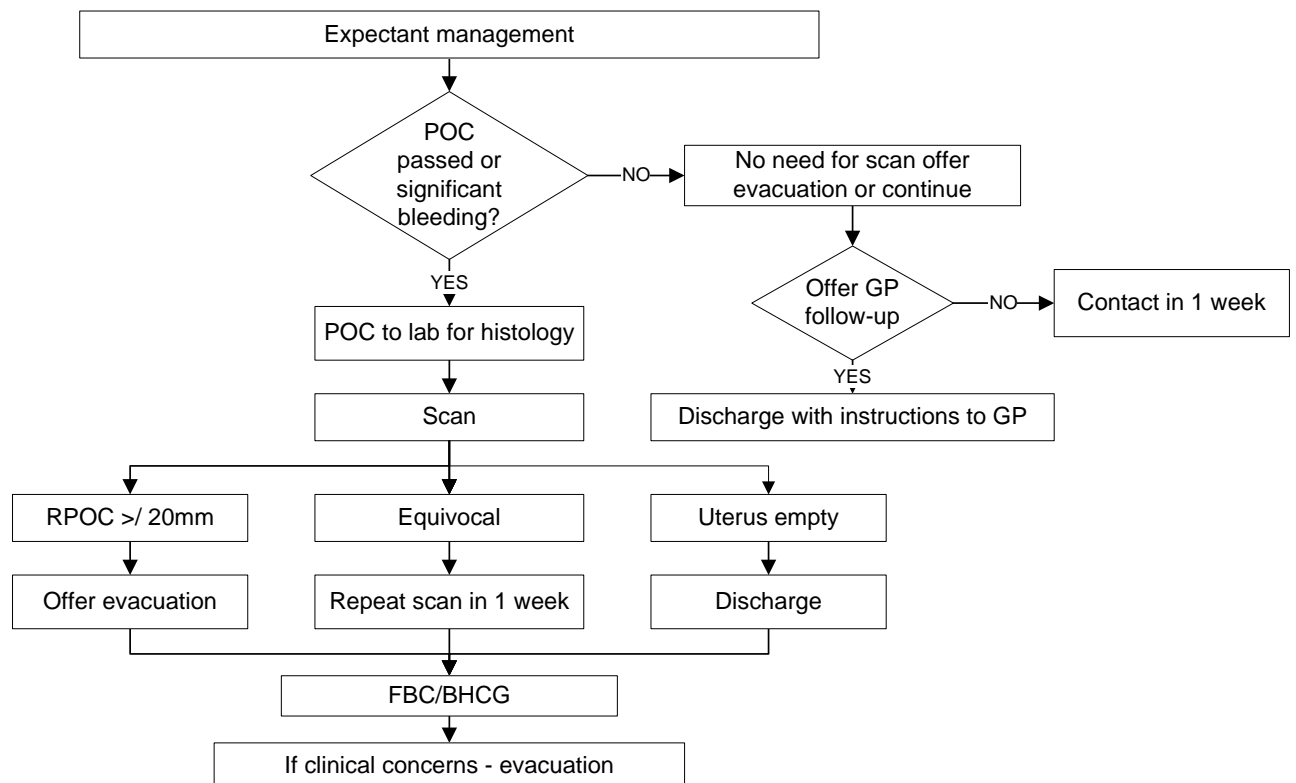
- Discussion on options and if appropriate a prescription for pain relief and anti-emetics
- A specimen pot to take home
- A follow-up EPAU appointment including +/- scan, FBC BHCG
- Contact phone numbers for EPAU and WAU

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6. Expectant management

See the patient in EPAU 1 week post initial assessment. Information about what to expect is crucial to the success of medication or expectant management. After the woman makes the decision to consider expectant management, the following should occur:

- Explanation of the information sheet
- Explanation of follow-up
- Opportunity to ask questions
- Documentation



Weekly contact subsequently

- BHCG at either Labtests or EPAU weekly and phone contact if well
- Follow till BHCG shows definite falling trend OR is < 50
- Surgical evacuation at any time at patient request or if clinical concerns
- Ensure patient returns with POCs (unless patient declines histology). POCs may be stored under refrigeration for a maximum of 3 days. POC should not be frozen
- Ensure histology report is viewed

By 4 weeks

- Surgical evacuation if miscarriage not complete by 4 weeks or sooner at patient request

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7. Medical management with misoprostol

- Exclude women with allergy to misoprostol or prostaglandins, or who are breastfeeding
- Review full information regarding the drug including licensing (misoprostol is not licensed for this indication and this off-label usage needs to be discussed with the woman. There is published literature to support it's use
- Agreement to Treatment form
- Can be managed in EPAU as an outpatient
- If managed in the ward admit as a ward review (visit < 3 hours)
- Baseline observations temp/heart rate/BP/O₂ saturation/pain score
- Administer misoprostol 800 micrograms into posterior fornix of vagina (wet tablet with normal saline or H₂O NOT lubrication jelly)
- Offer paracetamol and antiemetic (ondansetron) at the same time
- Advise patient to lie in horizontal position for ½ hour
- Discharge home after ½ hour
- Provide script for paracetamol, codeine phosphate and ibuprofen
- Provide pamphlet 'Managing your Miscarriage at Home'
- Provide container for POC
- Make an appointment on day 3 for additional dose of misoprostol (400mcg orally) if not miscarried in meantime
- Arrange an USS for day 8
- If tissue still present on day 8, organise surgical evacuation
- Admit for supportive care and consider evacuation if heavy bleeding/pain

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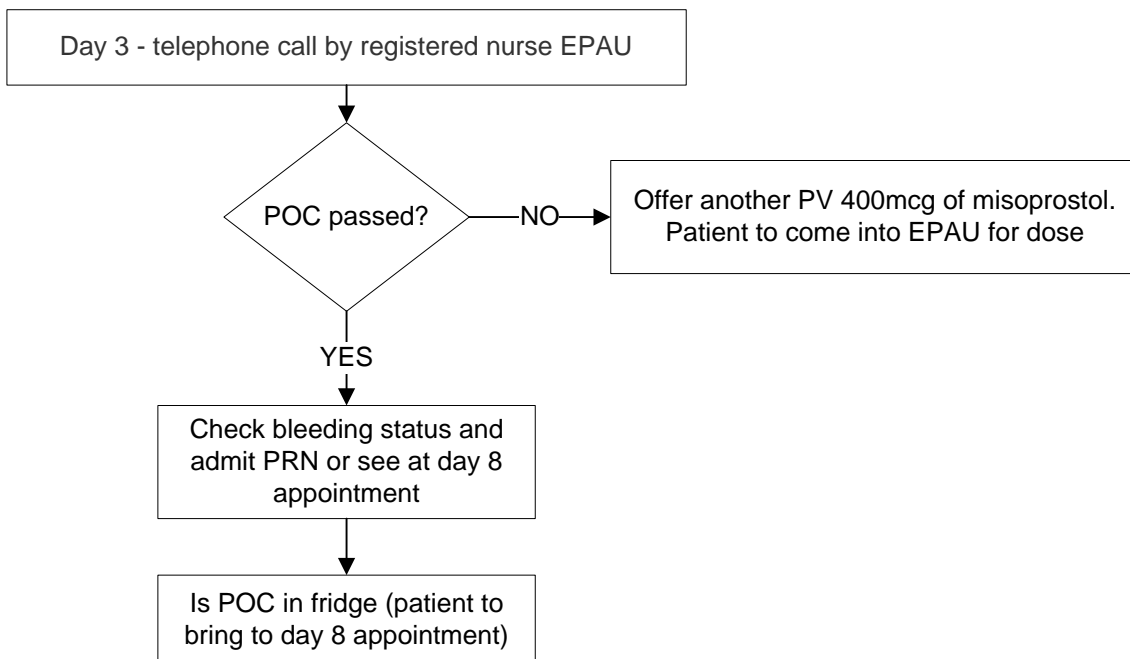
8. Follow up post medical management (misoprostol)

Timing of follow up assessment

Day of assessment in EPAU	Day 3 telephone call	Day 8 EPAU appointment
Monday	Wednesday	Monday
Tuesday	Thursday	Tuesday
Wednesday	Friday	Wednesday

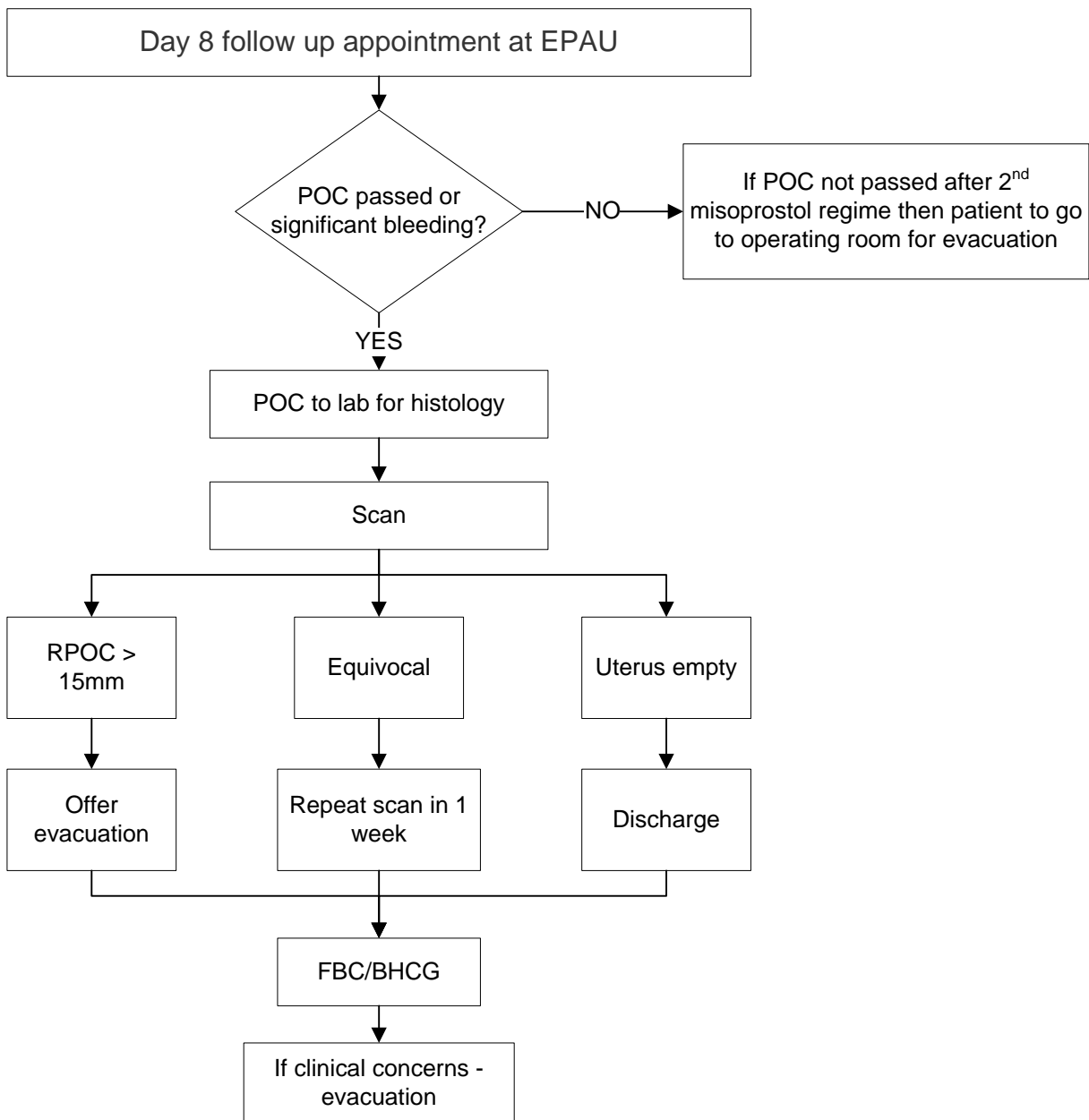
Day 3 telephone call – by registered nurse EPAU

- Check how the woman is managing
- Check the bleeding status and admit PRN to WAU



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Day 8 follow up appointment at EPAU



At 2 weeks – post discharge

- BHCG to check in 2 - 4 weeks time
- EPAU nurse issues a blood form
- Ensure histology report is reviewed to exclude gestational trophoblastic disease. If positive re-refer to EPAU

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9. Patient information – summary of important points

Information to patients after medication or expectant management (see separate information sheet)

- Expect bleeding for up to 2 weeks. If concern re heavy or prolonged bleeding to ring EPAU or WAU for advice
- Side effects of misoprostol include: nausea, vomiting, fever, diarrhoea, headache, dizziness
- Expect pain during uterine emptying. Take regular analgesia and if pain persists after uterine emptying, ring on-call registrar
- A sac or fetus may be seen in any tissue that is passed
- Encourage the woman to keep any tissue passed for histology and bring back in pot provided. However sensitivity is required in giving this advice
- Avoid intercourse, tampons, swimming and bathing for 2 weeks or for duration of bleeding
- If any signs of sepsis e.g. fever, PV discharge, undue pain, unwell, to ring EPAU or WAU for advice
- Expect a normal grief reaction. Counselling must be offered to all women
- Call at any time to speak to a nurse (numbers provided)
- There is an 80% chance of avoiding a D&C with a good outcome

Surgical management

- Assessment at EPAU
- EPAU nurse discusses the 3 options with the woman (expectant, medical and surgical)
- Woman seen by the RMO and appropriate plan of care decided on
- If surgical management, RMO to explain procedure and complete consents. SHO to consult with their registrar if required
- Confirm space availability for EVAC list with surgical booker
- Inform woman of EVAC appointment, where and when to present
- Woman to return to GP for follow up care

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10. Supporting evidence

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- Protocols from EPU, St George's Hospital, London
- [The management of early pregnancy loss](#) Green-top Guideline No. 25, Oct 2006: Royal College of Obstetricians and Gynaecologists
- Ultrasound: [Threatened miscarriage in the first trimester of pregnancy](#). Practice Improvement Project, RANZCOG, pp 9 – 11

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11. Associated ADHB documents

- [Informed Consent](#)
- [Ectopic Pregnancy](#)

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12. Disclaimer

No guideline can cover all variations required for specific circumstances. It is the responsibility of the health care practitioners using this ADHB guideline to adapt it for safe use within their own institution, recognise the need for specialist help, and call for it without delay, when an individual patient falls outside of the boundaries of this guideline.

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13. Corrections and amendments

The next scheduled review of this document is as per the document classification table (page 1). However, if the reader notices any errors or believes that the document should be reviewed **before** the scheduled date, they should contact the owner or the [Clinical Policy Advisor](#) without delay.

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