

Miscarriage – Expectant, Medical and Surgical Management

Unique Identifier	NMP200/SSG/008
Document Type	Clinical Guideline
Risk of non-compliance	
Function	Clinical Practice, Patient Care
User Group(s)	ADHB only
• Organisation(s)	Auckland District Health Board (ADHB)
• Directorate(s)	Women’s Health
• Department(s)	Gynaecology
• Used for which patients?	Women who have had or may have a miscarriage
• Used by which staff?	All clinicians working in gynaecology
• Excluded	
Keywords	
Author	Charge Nurse - Gynaecology
Authorisation	
• Owner	Service Clinical Director - Secondary Gynaecology Services
• Delegate / Issuer	Service Clinical Director - Secondary Gynaecology Services
Edited by	Clinical Policy Advisor
First issued	Yet to be determined
This version issued	20 November 2017 - reviewed
Review frequency	3 yearly

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1. Purpose of guideline

The purpose of this guideline is to facilitate a streamlined management of patients 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 patient chooses to have a surgical evacuation of the uterus (evacuation of retained products of conception – ERPOC) under general anaesthetic.

2. Diagnostic criteria for a failed pregnancy (missed miscarriage)

The diagnosis of early pregnancy failure or miscarriage should be made by an experienced clinician on standardised criteria using clinical and ultrasound findings in the presence of a positive pregnancy test. Sonographers, registrars and sonologists performing antenatal ultrasound examinations should 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.

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 (CRL) \geq 7 mm (missed abortion) or poor or absent growth of sac or fetus over 1 week

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 scans is dependent on the MSD at initial presentation. A normal gestational sac grows at a rate of 1mm/day so 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.

If the site of the pregnancy is unknown, it should be managed as a suspected ectopic pregnancy (refer Ectopic Pregnancy guideline, see associated ADHB documents section).

3. 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 the Rh(D) negative patient following a sensitising event and should 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 the Rh (D) negative patient 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 the Anti-D has been administered.

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 passing the pregnancy tissue when undertaking expectant or medical management will often require pain relief medication to be taken. In the case of surgical management, the tissue is removed while the patient is under anaesthetic. She may need some post-operative pain relief.

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

Any of the following patient presentations should 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

4. Initial assessment discharge checklist

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, Options for Your Care
 - 'Pregnancy Loss Service' (Oct 2013)
 - Anti D (where applicable)

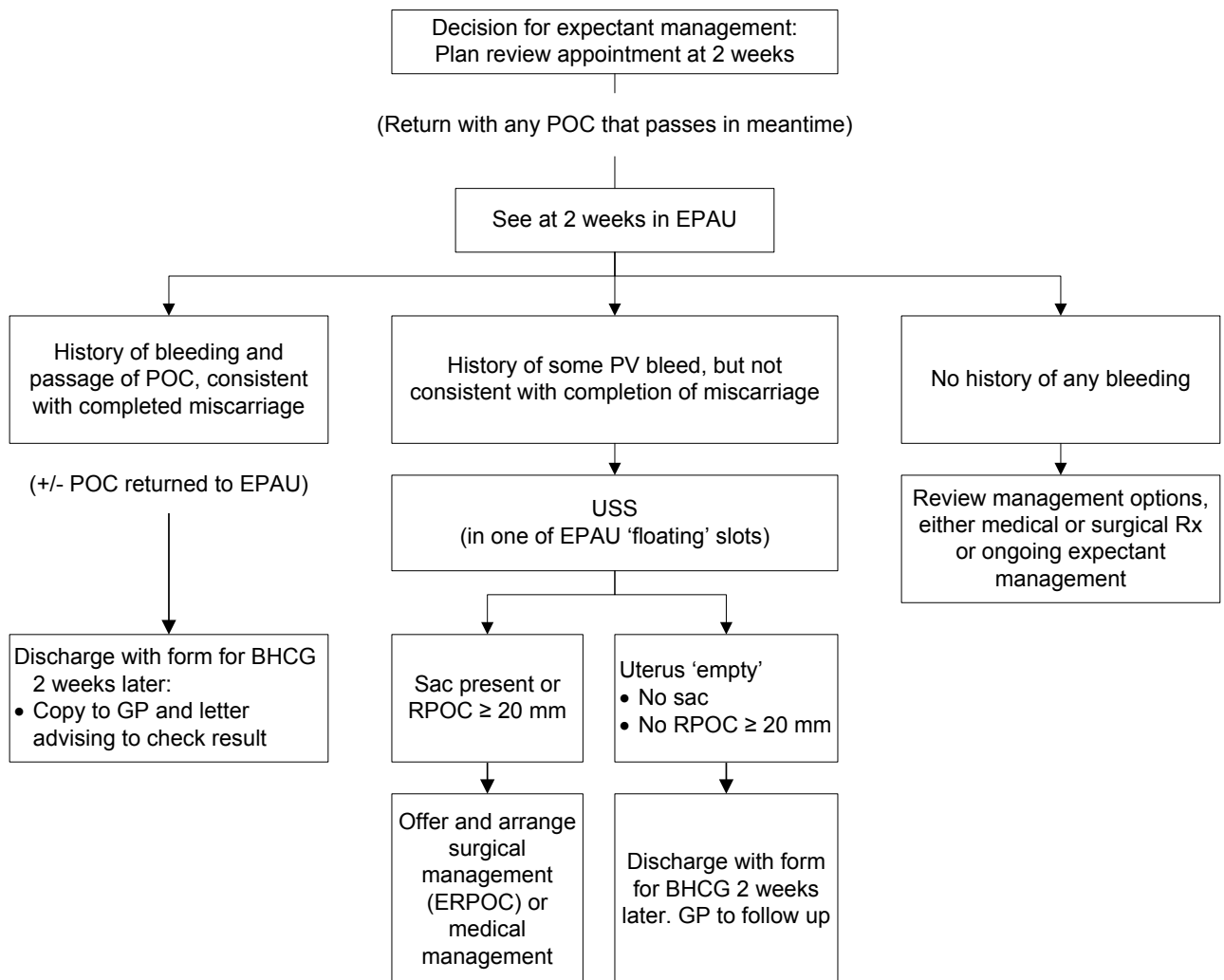
The patient has been given:

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

5. Expectant management

Information about what to expect is crucial to the success of medication or expectant management. After deciding on expectant management the following should occur:

- Explanation of the information within the leaflet 'Managing your Miscarriage, Options for Your Care'
- Explanation of follow up
- Opportunity to ask questions
- Documentation
- Give Labtests form for BHCG in 1 week. Explain that there will be a phone call to follow up the result
- Book a follow up EPAU appointment for two weeks time
- Provide a storage pot and encourage collection/return of POCs. These can be stored in refrigerator for up to 3 days but not frozen



- Expectant management timeframe is two weeks to allow sufficient time for POC to pass. Some patients may choose to wait beyond two weeks, or may change to medical/surgical management at any time
- Once discharged from the expectant management pathway, the patient is advised to have a follow up BHCG blood test. The result is copied to the GP who is advised to continue with weekly tests until the BHCG is <5 units
- Ensure any histology report is viewed

By 4 weeks

- Surgical evacuation or medical management if miscarriage not complete by 4 weeks or sooner at the patient's request

6. Medical management with misoprostol

- Exclude patients with an 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 patient. There is published literature to support its use)
- Complete agreement to treatment form
- Management is usually to be as an outpatient, coordinated from EPAU
- Baseline observations (temp/pulse/BP/O₂ sats/pain score)
- Administer analgesia and antiemetic (ondansetron) alongside the misoprostol
- Administer misoprostol 800mcg (4 tablets). These can be either placed into the posterior vaginal fornix or given by the buccal route where they are placed between the cheek and gum of the upper teeth
- For vaginal use tablets can be moistened with saline or water not lubrication jelly. The patient may prefer to self-administer these tablets. She should then be advised to lie in a horizontal position for 30 mins and can then be discharged home. Provide a script for analgesia as appropriate (paracetamol/codeine phosphate/NSAID)
- Provide 'Managing your Miscarriage, Options for Your Care' and the misoprostol patient information leaflets, as well as a container for POC
- The EPAU nurse to telephone the next day (day 2) to assess the outcome of the misoprostol treatment

NB. Once prescribed, in accordance with the ADHB 'Medications – Prescribing' policy, this medication should be administered and documented in accordance with the ADHB 'Medications – Administration' policy (see associated ADHB documents section).

7. Follow up post medical management (misoprostol)

Day of assessment in EPAU	Day two* telephone call	Day three telephone call (if required)
Monday	Tuesday	Wednesday
Tuesday	Wednesday	Thursday
Wednesday	Thursday	Friday
Thursday	Friday	Monday
Friday	Monday	Tuesday

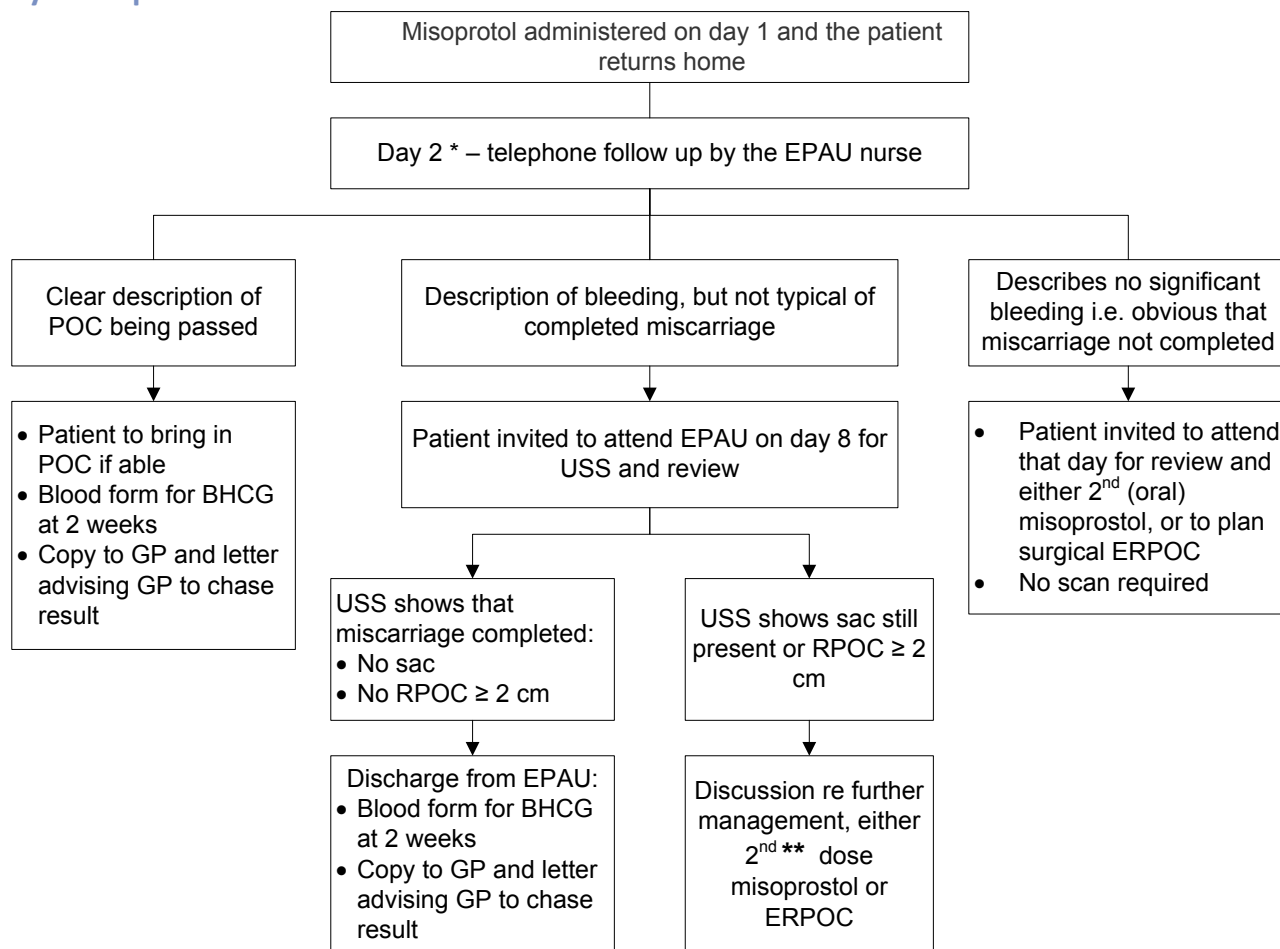
* If initial treatment on Friday, then follow up call will be on the next working day, i.e. Monday.

7.1 Day 2 telephone call by registered nurse in EPAU

Telephone call the next morning (day two) from EPAU nurse to enquire whether POC have passed following the initial misoprostol dose (specific clinical questions to be asked):

- If the patient clearly describes passage of POC then no further USS is necessary. Nurse to arrange two week follow up BHCG blood test and for delivery of any POC specimen to EPAU
- If obvious that POC has not passed overnight then repeat appointment arranged that day for either second misoprostol dose (400mcg orally) or to plan surgical ERPOC. After two unsuccessful doses of misoprostol the patient should proceed to surgical ERPOC
- If the EPAU nurse is unable to ascertain from the telephone call whether the misoprostol treatment has been successful, there should be a follow up scan and review booked for day 8. Management thereafter will depend on USS result. If no sac or RPOC > 2cm, then misoprostol has been successful. Otherwise, options of further misoprostol or surgical ERPOC

7.2 Day 2 telephone call



* Or next working day if initial treatment on Friday

** After 2 doses misoprostol, if still significant RPOC, then recommend ERPOC

7.3 EPAU follow up after day 2

If first misoprostol was successful then the patient is discharged to her GP on day two. She is given a Labtests form for a BHCG at two weeks and discharge letter asking her GP to chase the result.

If a second dose of misoprostol is used on day two, then further telephone follow up to occur on day three with similar options of care as those following initial misoprostol treatment.

7.4 At 2 weeks – post discharge

BHCG checked using a Labtests form, with GP to check up on result.

Ensure histology report is reviewed to exclude gestational trophoblastic disease. If positive, refer to Gynae-oncology service.

8. Patient information – summary of important points

Information to the patient after medication or expectant management (refer to ‘Managing your Miscarriage, Options for Your Care’ information leaflet):

- 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 the passage of pregnancy tissue from the uterus. Take regular analgesia and advise the patient that if pain persists after tissue has passed, she should telephone EPAU (WAU if after hours) to speak with a gynaecology nurse
- A sac or fetus may be seen in any tissue that is passed
- Encourage the patient 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 should be offered to all patients
- 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

9. Surgical management

- Assessment at EPAU
- EPAU nurse discusses the 3 options with the patient (expectant, medical and surgical)
- The patient is 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 the patient of EVAC appointment, where and when to present
- The patient to return to GP for follow up care

10. Supporting evidence

- Ayres-de-Campos et al. [Vaginal misoprostol in the management of first-trimester missed abortions](#). Int J G O 71(1): 53 – 7, 2000 Oct
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- Ultrasound: [Threatened miscarriage in the first trimester of pregnancy](#). Practice Improvement Project, RANZCOG, pp 9 – 11
- Wiebe and Janssen. [Conservative management of spontaneous abortions](#). Women’s experiences. Can Fam Phys vol 45, October 1999, pp 2355 – 2360
- Wood SL and Brain PH. [Medical management of missed abortion: a randomized trial clinical trial](#). Obstet Gynecol 99 (4): 563 – 6, 2002 Apr
- Zalanyi S. [Vaginal misoprostol alone is effective in the treatment of missed abortion](#). B J O G 105 (9): 1026 – 8, 1998 Sep

11. Associated ADHB documents

- [Ectopic Pregnancy](#)
- [Informed Consent](#)
- [Medications - Administration](#)
- [Medications - Allergies & Adverse Drug Reactions \(ADRs\) Identification, Documentation & Recording](#)
- [Medications - Prescribing](#)

Patient information

- Anti D
- Managing Your Miscarriage, Options for Your Care
- [Miscarriage – Misoprostol](#)
- [Miscarriage - Understanding Miscarriage](#)
- [Pregnancy Loss Service – NWH Social Work & Counselling Service](#)

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.

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.