HUTT maternity
Hutt Valley Maternity Care

HUTT VALLEY DHB

Document ID: MATY081	Version: 1.0
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Approved by: Maternity Quality Committee	Review date: May 2016

Miscarriage Management Policy

Hutt Maternity Policies provide guidance for the midwives and medical staff working in Hutt Maternity Services. Please discuss policies relevant to your care with your Lead Maternity Carer.

Contents

Purpose

To support clinicians in the management of women who have suspected or diagnosed miscarriage

Principles

Women should be offered evidence – based information and support to enable them to make informed decisions about management of their pregnancy. Womens' views and concerns are an integral component of the decision making process

Scope

Nursing, medical and midwifery staff in the Maternity Assessment Unit

Definitions:

Early Pregnancy: gestation up to 12 weeks and 6 days. (For pregnancy loss at ≥12+6/40 gestation see mifepristone protocol)
Miscarriage: The recommended medical term for pregnancy loss under 20 weeks is 'miscarriage' in both professional and woman contexts. The term 'abortion' should not be used.
Threatened miscarriage: a viable pregnancy is confirmed by ultrasound, but there has been an episode of PV bleeding.
Missed miscarriage: a non viable intrauterine pregnancy. No fetal heart activity is seen, the gestational sac is intact, the cervix is closed and no POC have been passed.

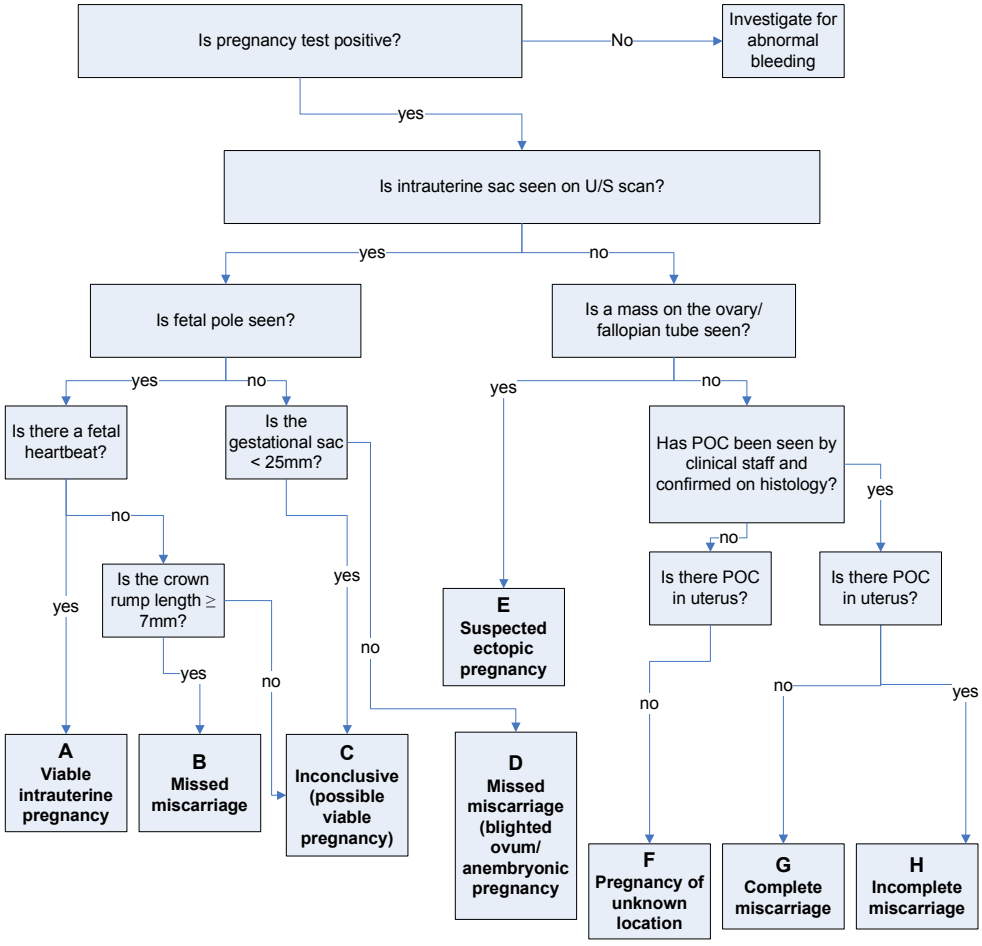
Incomplete miscarriage: some pregnancy tissue has been passed but there is a clinical or ultrasound evidence of retained tissue.
Complete miscarriage: all the pregnancy tissue has been passed and the uterus is empty.
Anembryonic pregnancy (blighted ovum): the gestational sac has developed but the embryo hasn't.
(R)POC: (Retained) products of conception. When discussing with women & their whānau, use a term such as 'pregnancy tissue', not 'products of conception'.
PUL: Pregnancy of unknown location. No signs of either intra or extra uterine pregnancy or RPOC in a woman with a positive pregnancy test.
Recurrent Miscarriage: 3 or more consecutive first trimester miscarriages.
Stillbirth: fetal loss at > 20 weeks gestation or >400g
ED: Emergency Department
MAU: Maternity Assessment Unit
ERPOC: Evacuation of retained products of conception

Diagnostic Criteria

Early Pregnancy Failure:

Gestational sac with no fetus AND mean sac diameter ≥ 25mm (anembryonic pregnancy / blighted ovum) fetus present but no cardiac activity with crown-rump length ≥ 7mm and /or poor or absent growth over 1 week of gestational sac and/or fetus

Maternity Assessment Unit Early pregnancy diagnosis algorithm



Initial Assessment:

- Clinical assessment should be undertaken including medical history and examination if appropriate
- A non-viable pregnancy MUST be confirmed by formal USS or falling serial HCG levels when the USS findings are inconclusive
- When a choice of management options is available, women should be involved in choosing their preferred treatment
- Provide information regarding the treatment options and advise women of the risks and benefits associated with each approach
- Emotional support: offer additional support and counselling if wanted
- Rhesus status – if Rhesus negative, anti D will be required (see anti-D administration policy)
- If pregnancy >12+6 week size, refer to mid trimester pregnancy loss protocol
- Consider STI screen (especially if risk factors or age <25) – woman can self-swab
- Discuss future pregnancy plans. If desires another pregnancy can attempt to conceive when feels ready (no need to delay pregnancy). Ensure has prescription for folic acid and iodine.
- If not planning another pregnancy, discuss contraception and prescribe as necessary

If the initial scan is inconclusive i.e. CRL < 7mm or MSD < 25mm, a follow up scan should be arranged (in 1 -2 weeks). As the diagnosis of a failed pregnancy cannot be made until the sac size is (or has failed to reach) 25 mm, 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. 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.

	Diagnosis and finding	Plan of management
A	**Viable pregnancy** • Intrauterine gestational sac seen • Fetal pole seen • Fetal heartbeat seen	• Provide reassurance and discharge to antenatal care provider • If not booked for antenatal care, give list of LMC providers or arrange secondary care clinic appointment • Check need for anti-D • Ensure on iodine and folic acid • If repeated bleeding ensure speculum exam to ensure no local (cervical) cause for bleeding
B	**Missed Miscarriage** • Intrauterine gestational sac seen • Fetal pole seen • Fetal heartbeat not seen • CRL is ≥ 7mm	• Expectant, medical or surgical management • Check the need for anti-D

C	**Inconclusive** (possible viability) • Intrauterine gestational sac seen • Fetal pole seen • Fetal heartbeat not seen • CRL is < 7 mm • Gestation sac of <25 mm with no fetal pole	• Ensure woman clinically stable • Repeat scan in MAU in ≥1 week • If viable pregnancy subsequently confirmed, follow plan of management as per A (if not follow **B**) • Check the need for anti-D
D	**blighted ovum/anembryonic pregnancy** • Intrauterine gestational sac seen • Fetal pole not seen • Gestational sac ≥ 25mm	• Ensure woman clinically stable • Check the need for anti-D • Expectant, medical or surgical management
E	**Suspected Ectopic pregnancy** • Intrauterine gestational sac not seen • Ovarian/fallopian mass seen • Free fluid in pelvis on U/S	• Obtain blood (BhCG, G&H, FBC) • Refer to *Ectopic pregnancy management policy* • Check need for anti-D
F	**Pregnancy of unknown location** • Intrauterine gestational sac not seen • No ovarian/fallopian mass seen • No POC passed • No POC seen in uterus	• Obtain blood (BhCG, G&H, FBC) • Ensure woman is clinically stable • Repeat BhCG in 48 hours, if increasing repeat U/S in 1 week • If decreasing, **needs weekly HCG until undetectable (<5)** • Check need for anti-D
G	**Complete miscarriage** • Intrauterine gestational sac not seen • No ovarian/fallopian mass seen • POC have passed (if in doubt as per F) • No POC seen in uterus	• Check need for anti-D • Discuss need for contraception • If planning another pregnancy, ensure on folic acid
H	**Incomplete miscarriage** • Intrauterine gestational sac not seen • No ovarian/fallopian mass seen • POC have passed • POC are seen in uterus	• Expectant, medical or surgical management • Check need for anti-D

Management Options:

- Women should be involved in their choice of management
- All women should be offered expectant, medical or surgical management
- The choice of management option will take into account:
- Amount of bleeding and haemodynamic stability
    - Signs of infection
    - Woman's access to transport and hospital and ability to comply with follow up

Expectant management

The woman awaits spontaneous passage of products. Woman should be counselled of unpredictability and risk of bleeding and pain.
Higher success rate with incomplete miscarriage and small sac (<35mm)

There is a higher risk of needing further procedure, surgical or medical especially with increasing gestation i.e. late first trimester and a small risk of needing emergency evacuation in case of heavy bleeding.

Indications:
All miscarriages (first trimester)

Exclusions:

- Unable to return to hospital in case of heavy bleeding / lack of access to transport
- Suggestion of molar pregnancy
- Heavy vaginal bleeding / shock
- Clinical signs of infection
- Iucd in situ (remove)

Follow Up:

- Ensure woman has our contact details and written information on how to contact MAU or ED
- Ensure provisions for anti-D administration are discussed with rh-neg women; anti D at diagnosis or within 72 hours of passage of POC
- Prescribe analgesia to take home – paracetamol, voltaren +/- codeine, tramadol and anti-emetic.
- Phone call at two weeks (earlier if woman desires)
    - If POC passed (on history) and bleeding settled, woman to perform urine HCG in 3 weeks.
    - MAU to contact woman for result
    - If urine HCG negative and woman asymptomatic, discharge
    - If HCG positive, consider ultrasound. If significant RPOC, offer medical or surgical management
    - If POC not passed or ongoing bleeding, offer follow up US
    - If RPOC, offer medical or surgical management

- Woman may request medical or surgical management at any time if POC not passed
- Contact MAU if any signs of infection
- Clinical history is more useful than follow up HCG levels. If bleeding is not settling or increasing, this is suggestive of RPOC. If the woman passes POC and the bleeding settles, this suggests that the miscarriage is complete.

Medical Management:

The woman is counselled of unpredictability and risk of bleeding and pain.

As the gestation increases, the success rate decreases and the risk of needing a subsequent surgical procedure is higher. Medical management of a miscarriage carries higher rates of pain and bleeding with increasing gestations.

Anticipated Outcome:

- Misoprostol, a prostaglandin analogue, is used to induce uterine contractions that expel the pocs from the uterus. Side effect- nausea, vomiting, diarrhoea
- Success rates of between 50-95% are quoted
- Resolution rates are higher than expectant management, lower than surgical management

Exclusions:

- Unable to return to hospital if heavy bleeding / lack of access to transport
- Ultrasound and / or hcg levels were not able to confirm a non-viable intrauterine pregnancy
- Iucd in situ (remove iucd prior to misoprostol)
- Suggestion of molar pregnancy
- Heavy vaginal bleeding / shock
- History of allergy to misoprostol or prostaglandin
- Clinical signs of infection

Management:

- Obtain written consent
- Prescribe anti d if required
- **First dose**
    - 800 mcg misoprostol po (4 tablets), must be prescribed by a doctor and will be dispensed in MAU.
- Offer woman a phone call from MAU at 24 hours
- If no miscarriage or obvious passage of products has occurred within 24 hours from the first dose then the woman should take a second dose of misoprostol
- The **second dose** of 800 mcg misoprostol (4 tablets) will be prescribed for the woman to pick up at a community pharmacy once discharged from MAU.
- Woman should have oral analgesia: paracetamol, voltaren, +/- codeine or tramadol
- 48 – 72 hours after commencement of medical management the MAU nurse will call the woman and ask:
    - Did they take the second dose of misoprostol

    - Have they passed tissue
    - If poc passed
    - If bleeding settling, for follow up urine HCG 3 weeks. If negative no follow up
    - If bleeding not settling for follow up ultrasound in 3 weeks consider ERPOC
    - If no POC passed
    - Review in MAU in one week. If no POC passed, for ERPOC
    - Could consider repeat dose of misoprostol depending on woman's wishes
- Bleeding should settle in 2-3 weeks. If ongoing bleeding for follow up scan consider ERPOC
- Clinical history is more useful than follow up HCG levels. If bleeding is not settling or increasing, this is suggestive of RPOC. If the woman passes POC and the bleeding settles, this suggests that the miscarriage is complete.

Surgical Management (ERPOC)

Involves risk of general anaesthesia and risk of procedure i.e. infection, perforation but is predictable and lesser risk of bleeding.

Anticipated outcome:

- Day case procedure under general anaesthetic

Recommended if:

- Haemodynamically unstable
- Infection (under antibiotic cover)
- Unacceptable bleeding
- May be preferred for late first trimester
    - It is the size of the pregnancy, not the reported gestation that should be used to make this decision
    - If pregnancy > 13/40, management should be medical as per mid-trimester miscarriage guidelines
    - If size 12-14 week then erpoc may be an option but this must be discussed with an SMO and a junior registrar should not do this erpoc

Process:

- RMO to:
    - Complete planned acute OT booking form
    - Telephone OT coordinator
    - Complete online acute booking form
    - Phone duty anaesthetist to inform them of woman
    - Consent for ERPOC and for misoprostol
    - Chart misoprostol 400 mcg 30-60 minutes pre-op
    - Consent, order and chart anti D if Rh negative (can be given in theatre)
- Ask woman if she wants POC returned to her and complete necessary paperwork if yes
- Check Rhesus status – for anti D in OT if Rh negative
- Offer STI screening (can self-swab)
- Ensure has written NBM instructions and DSU admission instructions

- Discuss future pregnancy plans. If desires another pregnancy attempt to conceive when feels ready (no need to delay pregnancy). Ensure has prescription for folic acid and iodine
- If not planning another pregnancy, discuss contraception
    - IUCD or jadelle can be inserted in OT if desired.

Recurrent miscarriage

- Recurrent miscarriage is defined as the loss of three or more CONSECUTIVE pregnancies
- If affects 1% of couples
- The majority of women with recurrent miscarriage will have a successful subsequent pregnancy
- If appropriate, women should be advised to stop smoking and to attain a normal BMI
  Investigations:
  Anti-Cardiolipin antibodies & Lupus anticoagulant testing
  Karyotyping of both parents
  Cytogenetic analysis of the POC
  An Ultrasound to assess uterine anatomy
  Thyroid function test of history of or symptoms of thyroid disease
- If second trimester miscarriage, a thrombophilia screen should be offered
- Woman should be offered referral to Gynaecology outpatients- investigations should be arranged prior to OPD appointment

Informed Consent

The right of a consumer to make an informed choice and give informed consent, including the right to refuse medical treatment, is enshrined in law and in the Code of Health and Disability Consumers' Rights in New Zealand. This means that a woman can choose to decline treatment, referral to another practitioner, or transfer of clinical responsibility. If this occurs follow the process map on page 18 of the Referral Guidelines (Ministry of Health, 2012).