

Manual Vacuum Aspiration (MVA)

The Care & Management of women requiring Manual Vacuum
Aspiration for management of pregnancy loss <12/40

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Key principles

A protocol is a set of measurable, objective standards to determine a course of action. Professional judgement may be used in the application of a protocol.

Guideline/ Policy aim

This protocol /guidelines apply to women presenting with early pregnancy loss opting for manual vacuum aspiration.

To ensure medical and nursing staff are aware of the management of women undergoing Manual Vacuum Aspiration within BSUH NHS Trust.

To ensure the patient receives individual care and reassurance during and following Manual Vacuum Aspiration within BSUH NHS Trust.

Objectives

To ensure the patient receives individualised care and reassurance during this procedure.

Responsibilities & Roles

All medical and nursing staff

- To access, read, understand and follow this guidance
- To use their professional judgement in application of this protocol
- To ensure that any training required is undertaken appropriately
- To ensure signatory is signed upon reading this guideline following ratification

Early Pregnancy Unit Sister

- Is responsible for the day to day implementation of this guideline in the Unit.
- She is responsible for ensuring:
 - All staff are aware of their role under the policy
 - Equipment is suitable and sufficient (if relevant)
 - Records are kept of staff awareness and reading of new guidelines.
 - Ensuring incidents / issues are reported using the Trust Adverse Incidents/ Near Miss reporting system.

Management:

- To ensure the protocol is reviewed as required in line with Trust and National recommendations
- To ensure the protocol is accessible to all relevant staff
- These guidelines and algorithms are aimed to assist in decision making. They are not designed to be prescriptive and you are not expected to use them in exclusion of discussions with senior colleagues.
- Evidence used to inform these guidelines had been drawn from published

clinical reviews. Where applicable other references are quoted.

- To ensure guideline is circulated to all obstetric consultants, all members of the policy and procedures group, senior ward managers, lead supervisors of midwives and any other staff appropriate to the guideline for information and comments prior to ratification
- To ensure that this guideline is presented in the correct format, is accurate, up to date and adheres to best practice evidences and national guidelines

1 Objectives & Criteria for MVA

- 1.1 This guideline applies to the management of retained products of conception and failed medical or surgical management of miscarriage.
- 1.2 MVA may be performed by any consultant Gynaecologist who has trained in MVA.
- 1.3 MVA may be performed by any Registrar grade doctor who has been signed off competency for independently performing SMMs, has also obtained training for MVAs and has been signed off for performing MVAs by the EPU Lead consultant.

2 Eligibility

All women with an early embryonic demise or incomplete miscarriage (<10 weeks) who have a mean sac diameter less than 4cm are eligible, providing they meet the following criteria:

- Access to a telephone
- Understands procedure (discussion via interpreter reasonable)
- Escort/chaperone available to stay with them and take them home

3 Exclusions

The following women are not suitable for this procedure:

- Allergy to local anaesthetic or misoprostol
- No chaperone available
- >10 weeks
- History of panic attacks
- Cervical stenosis or previous LLETZ
- Unable to tolerate a speculum examination
- Fibroid uterus (discuss with consultant)
- Uterine malformations
- Haemorrhagic disorders
- On anticoagulants
- Postnatal retained products
- Uterine infection

4 Counselling, Education and Informed Consent

- 4.1 Women wishing to have an MVA should be assessed and consented in the normal way for a SMM by the doctor seeing the patient. The histology / tissue disposal form should be completed.
- 4.2 The procedure, risks and alternatives should be explained to the

patient and all questions answered.

- 4.3 An information leaflet should be provided and a consent form signed.
- 4.4 Pain control during the procedure should be discussed
 - 4.4.1 The woman will be advised to take an analgesic 1 hour prior to her appointment at the clinic/unit. Suitable option include:
 - Paracetamol 1g or Cocodamol 30mg/500mg (2 Tablets)
 - Ibuprofen 800mg stat dose
 - Lanzoprazole 20mgThe prescription for the analgesia if required should be given during the initial consultation.
 - 4.4.2 Entonox will be available to the patient throughout the procedure
 - 4.4.3 Intra or para-cervical local anaesthetic will be provided unless patient has an allergy or declines; this may be an injection and/or lidocaine gel
- 4.5 Misoprostol 400mcg PV an hour before the procedure
- 4.6 Women under 25 years old should be offered screening for Chlamydia or prescribed Azithromycin 1g post-procedure
- 4.7 The woman should be advised that a health professional will be at her side during the procedure providing reassurance and support

5 Medical history, physical examination and Laboratory evaluation

- 5.1 Full assessment of the patient should be undertaken as per routine SMM
- 5.2 Any patient with a complex medical history, where suitability is not clear, should have her case discussed with the Consultant doing the procedure.
- 5.3 FBC and G&S should be taken prior to the procedure
- 5.4 Rhesus status must be obtained and if indicated, Anti-D immunoglobulin provided

6 Treatment

6.1 Patient Preparation

- 6.1.1 Upon arrival, the women should report to the ward receptionist and will be asked to wait in the waiting room.
- 6.1.2 Before the treatment begins, the patient should be introduced to the nurse/assistant and doctor, the procedure should be reviewed with her including the use and benefits of Entonox and any questions she has should be answered
- 6.1.3 The patient will be checked by the nurse in charge of the list and given their misoprostol to self-administer. If the patient is unable to do this, the on call SHO for gynaecology will be able to do this.
- 6.1.4 An initial set of observations should be taken and recorded in the case notes
- 6.1.5 The patient will be brought into the procedure room and the consent will be confirmed by the surgeon and the second stage consent will be taken.
- 6.1.6 The client should be offered some privacy to change and will be provided with a gown
- 6.1.7 The procedure will be explained again and, after emptying her bladder, the woman should be positioned comfortably on the couch in the lithotomy position.
- 6.1.8 Dignity and privacy should be maintained at all times with the appropriate use of clothing/sheets and through management of the clinical environment.
- 6.1.9 An entonox mask or mouthpiece should be offered to the patient and instructions on its use provided

6.2 Equipment / medication required

- 6.2.1 Equipment required
 - Gynaecology couch with stirrups
 - MVA aspiration kits – double valve aspirator and easy grip cannulas sizes 4-12 mm
 - Dilators
 - Ultrasound machine
 - Suction curettes
 - Histology specimen pots and forms
 - Disposable Cusco's speculum
 - 20 ml and 10ml syringes

- Green and blue needles
- Gloves
- Drapes
- Procedure trolley
- Simm's speculum
- Hegar dilators X 4 (3/4, 5/6, 7/8, 9/10)
- Vulsellum/ Tenaculum
- Hibitane cleansing solution
- Adequate lighting to examine POC
- Sponge forceps
- Staff 1 x axillary nurse, 1 x staff nurse

6.2.2 Medication required

Ward medication

- Lignocaine 1% 10ml ampoules
- lignospan
- Misoprostol 200mcg tablets (400mcg PV)

TTO

- Paracetamol 1G
- Ibuprofen 400MG
- Azithromycin 1G

7 Procedure

- 7.1 Gentle bimanual examination should be performed to assess the uterine size and ante-retroflexed uterus. The use of ultrasound during the procedure may be helpful.
- 7.2 After introduction of a vaginal speculum, the vagina and cervix should be cleaned with a non-spirit based preparation such as Chlorhexidine or Betadine.
- 7.3 2% lignocaine without adrenaline (For a 50kg individual the maximum dose 7.5mls) should be injected into the cervix at the anticipated site of the vulsellum/ tenaculum application and 3 and 9 o'clock; instillation of intra-cervical Lidocaine gel is an alternative option.
- 7.4 May require dilatation
- 7.5 Once this is effective, the cannula should be inserted gently through the cervix into the uterine cavity, just passed the internal os; rotating the cannula with gentle pressure often helps ease insertion.
- 7.6 Attach the charged self-locking syringe to the cannula and Advance the cannula until it gently touches the fundus and then withdraw it slightly.
- 7.7 Open the valve so that the vacuum is applied to the uterine cavity and Move the cannula gently back and forth from the fundus to the internal cervical os while rotating it to aspirate all sections of the uterus.
- 7.8 The aspiration process is complete when no further tissue is seen passing through the cannula. Other signs of complete aspiration are when pinkish foam is seen passing through the cannula, a gritty sensation is felt as the cannula passes over the surface of the evacuated uterus, and the uterus contracts around the cannula.
- 7.9 Throughout the procedure the patient will have a nurse present to offer support and will continually reassess and make sure the patient is comfortable and willing to allow the procedure to continue
- 7.10 If at any point the woman is in pain or indicates that she would like the procedure to be stopped, - the procedure should be halted immediately and all the instruments removed.

8 Tissue Examination

- 8.1 Empty the contents of the evacuation into an appropriate container by removing the cannula, releasing the button if not depressed, and gently pushing the plunger completely into the cylinder. Do not push aspirated contents through the cannula
- 8.2 The evacuated tissue must be examined and must be sent for histological examination in all cases and Karyotyping if appropriate
- 8.3 Post procedure ultrasound may also be helpful to document that the aspiration was complete
- 8.4 If, on inspection of the tissue, there is concern about molar, ectopic or any other abnormal pregnancy, the aspirate must be sent for histological examination, the patient should be informed and immediate referral made for further management

9 Post-procedure care

- 9.1 Once the procedure is complete the patient should be taken to a bed to recover
- 9.2 Observations (pulse, BP, PV loss) should be recorded twice, 30 minutes apart
- 9.3 Refreshment is offered to the patient at an appropriate time
- 9.4 Anti-D should be offered if the woman is Rhesus negative.
- 9.5 When the patient is fully recovered, she can be discharged
- 9.6 A routine follow up appointment is not necessary after an uncomplicated procedure
- 9.7 Patients should be advised to perform a urine pregnancy test in 3 weeks and contact EPAU if still positive.
- 9.8 Patients should be advised to contact the EPAU if they have persistent bleeding and /or pain post procedure.

10 Duration of Stay

Procedure is typically 10-15 minutes and recovery time 60 minutes

Appendix A: Patient Information Leaflet

Management Of Miscarriage under Local Anaesthetic (MVA)

We are sorry that you have had a miscarriage.

To help you get through this difficult time, you should have already received information on different treatment options (Miscarriage leaflet). This leaflet gives you information about a surgical option called Manual Vacuum Aspiration (MVA), which can be done using local anaesthetic.

What is an MVA?

MVA is a way of emptying the uterus (womb) while you are awake. It uses a narrow tube to enter and empty the womb using gentle suction. Anaesthetic is applied to the cervix (neck of the womb) to numb any physical sensations felt, including pain.

Why have an MVA?

Research has found MVA to be:

- 98-99% effective.
- Associated with less blood loss than the same procedure when performed under General Anaesthetic.
- Associated with less pain.
- Takes a shorter time to complete than other surgical methods.
- No general anaesthetic risks as you are awake during the procedure.

Who can have an MVA?

MVA is offered to women in the following situations:

- Incomplete miscarriage (where some of the pregnancy tissue remains inside the uterus)
- Missed miscarriage at gestations less up to 10weeks (where a pregnancy has stopped growing but the pregnancy sac is still present inside the uterus)

What does it involve?

You will be admitted to our ward for a few hours. Before the procedure we will give you some medication for pain relief to take and we may insert vaginal tablets (misoprostol) to help soften and open the cervix (neck of the womb). This helps make the MVA procedure easier and safer. These tablets can sometimes cause cramping pain and bleeding. We would also insert a cannula (small plastic tube) in your hand/forearm so as to be able to give you fluids or medications if required.

The MVA will be performed in a clinical environment where a doctor will use a speculum (similar to that used in a smear test) to look at the neck of the womb. Local anaesthetic may be injected into the neck of the womb to numb this area, and then, using a tube and syringe the tissue remaining from the miscarriage will be removed.

The actual procedure itself should take only a few minutes although you will be on the couch for longer. During this time you will experience some crampy abdominal pains, which should settle after the procedure. We can stop the procedure at any time at your request.

We want you to be as comfortable as possible during the procedure. Nitrous oxide (known as gas and air) is also available for pain relief and clinical staff will help you to use this if this is what you choose.

If needed medication for pain relief will be offered at the end of the procedure.

We would ask you to stay for a short while after the procedure to ensure you are well enough for discharge. We would like someone to accompany you home, as you should not drive yourself.

Are there any side effects with Misoprostol?

Misoprostol is the medicine inserted into the vagina before the procedure to help soften the neck of the womb. Possible side effects include: nausea, vomiting, diarrhoea, abdominal pain, headache, hot flushes and an unpleasant taste in the mouth.

What happens after the MVA?

We will monitor you for a couple of hours after the procedure. This will include taking your blood pressure, pulse and checking if you are in pain. You can go home once you have passed urine and feel well enough. We recommend someone escorts you home after the procedure.

You can expect some bleeding after the MVA which will usually settle within seven days. We recommend using sanitary towels instead of tampons and advise you not to have sexual intercourse until the bleeding has stopped. This reduces the risk of infection. You may return to work in 48 hours, or when you feel able.

If your blood group is rhesus negative we would offer an injection of Anti-D.

What are the risks of the procedure?

Although MVA has been proven to be very safe, like any treatment there are some risks:

Frequent Risks:

- There is a small risk that we may not remove all the tissue, therefore the procedure would

have to be repeated again.

- There is a small risk of bleeding, and even smaller risk of severe bleeding, which may result in needing a blood transfusion.
- There is a minimal risk of infection, - which can be treated with antibiotics.
- You may also feel faint after, or near the end of the procedure. This reaction is normal, and usually disappears soon after.

Serious Risks:

- There is a very rare risk of perforating the womb (a hole in the uterus), which would require Laparoscopy under General Anaesthetic in theatre. We would investigate the perforation and repair any injuries found.

What alternatives are available?

There are several alternatives to managing your miscarriage and these should already have been discussed with you. These include:

- Conservative Management i.e. doing nothing and allowing the natural expulsion of the miscarriage.
- Medical Management using tablets to help you miscarry.
- Surgical Management under general anaesthetic where you would be put to sleep for the procedure.

Further details on all these options can be found in Patient Information Leaflet on Miscarriage.

What if I cannot decide?

Please feel free to take as much time as you feel necessary. Please do not feel like you have to choose this option, or be rushed into a decision. We understand that this choice may be difficult, but previous research has found that women generally coped better when they were able to choose the management method that they felt best for them at that time. Please feel free to contact us if you have any questions.

Further resources you may find useful: www.miscarriageassociation.org.uk

If you want to discuss any of the options for the management of your miscarriage further, please contact the Early Pregnancy assessment Unit.

What shall I do if I have a problem or concern?

The risks of complications are very small but if you have heavy bleeding, severe abdominal pain, a fever or vaginal discharge, please:

- Contact the EPAC nurse specialist on Monday to Friday, times.....
- Call the Gynaecology ward (Horsted Keynes) for advice on
- Contact or visit your GP
- Go to your nearest A&E department or call 999 in the event of an emergency

Several national organisations can provide support and information:

The Miscarriage Association

www.miscarriageassociation.org.uk

Tel: 01924 298834

Babyloss

A UK based resource of information and support for bereaved parents and their families who have lost a baby at any stage of pregnancy.

www.babyloss.com

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