University Hospitals of North Midlands NHS
NHS Trust

Manual Vacuum Aspiration (MVA) for Surgical Management of Miscarriage Under Local Anaesthetic

Date of Ratification:	July 2020
Date of Next Review:	July 2023
Ratified by:	Obstetric and Gynaecology Business and Performance Meeting
Reviewed by:	Consultant Obstetrician & Gynaecologist

VERSION CONTROL SCHEDULE

Version	Date	Author	Comments
1	December 2013	Dr M Shemar and Prof J Guptar Birmingham Women's Hospital Y Dibble and J Gooding EPU Nurses in UHNM	
2	September 2015	Ads above	Minor typographical errors made. Consultant lead changed to read: Dr Z El-Gizawy Updated to include This has now been reviewed by staff at County Hospital. Patient information leaflet updated –section headed What does it involve? First sentence - removed the words a tampon containing All references removed. Appendix 1 updated: Pain Relief and Procedure section - updated to include: metoclopramide 10 mgs orally. Postoperative care section to include: Should the patient become haemodynamically unstable and extreme heavy p.v. bleeding occurs, the patient should be transfer to the Surgical Assessment Unit (SAU) – in accordance with the existing emergency care pathways. The Gynaecology Registrar should be informed and CEPOD booked as per medical assessment indicates. If patient remains stable, allowed home. Patient Discharge/Follow up section – updated to include: patient is warned of watery bloody discharge for up to 4 weeks.
3	July 2020	Mr Mohamed Shahin Consultant Obstetrician and Gynaecologist	Full revision of the guideline. Updated patient information leaflet. Added Patient satisfaction survey, sample consent form, sample operation note and Emergency Protocol for Acute Collapse.

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Abbreviations used in this guideline	
EPU	Early Pregnancy Unit
MVA	Manual Vacuum Aspiration
WHO	World Health Organization
VTE	Venous Thromboembolism
LA	Local Anaesthetic
NEWS	National Early Warning Score

Manual Vacuum Aspiration (MVA) under Local Anaesthetic

(Surgical Management of Miscarriage under Local Anaesthetic)

1. PURPOSE OF GUIDELINE

This aim of this guideline is to describe the dedicated **consultant-led and delivered** outpatient service for women choosing an evacuation of the uterus under a local anaesthetic in the outpatient setting / EPU.

In the event that the outpatient setting is not available, this guideline can apply for the use of the local anaesthetic service in theatre on the **emergency or elective list**.

2. BACKGROUND

Early miscarriage is defined as the loss of pregnancy within the first 12 weeks of gestation, where an empty pregnancy sac or sac with fetus with no fetal heart activity is identified. In the UK miscarriage can be managed expectantly, medically or surgically. Surgical management includes the option of Local anaesthetic or General anaesthetic. The manual vacuum aspiration (MVA) is a simple procedure performed under local anaesthetic, using a catheter and 60ml hand-held syringe, to produce the vacuum needed for removal.

MVA has now been performed for more than 30 years in the United Kingdom, United States and globally. It has been shown to be a safe procedure, with up to 98-99% success rates and good patient acceptability. It offers an additional choice to women with miscarriage who want surgical treatment without having a general anaesthetic (being put to sleep). MVA was found to have low pain and anxiety associated scores; with 98% of women being 'satisfied' with the procedure.

At University Hospitals of North Midlands NSH Trust (UHNM) this procedure will be undertaken at the Royal Stoke University Hospital site for non-viable pregnancies.

Why to choose MVA over surgical management under general anaesthetic?

Manual vacuum aspiration under Local anaesthetic	Surgical management under General anaesthetic
Provided in a clinic setting	Provided in an operating theatre setting
Planned appointment - less risk of cancellation.	Planned admission to the ward however there is an increased risk of delays or cancellation while waiting for availability of theatre space.
The success rate of treatment is equal	
Local anaesthetic used. Therefore, no grogginess and minimal nausea after the procedure	General anaesthetic used. Therefore, increased grogginess and nausea after the procedure.
Shorter stay in hospital. Approximately 2 hours.	Longer stay in hospital. Usually a minimum of 6 hours

3. GUIDELINE SCOPE

This guideline applies to all Trust employees, irrespective of grade, level, location or staff group, including locum and agency staff, students and staff employed on honorary contracts who are involved with non-elective patients referred for EPU assessment.

4. DOCUMENT DEFINITIONS

Early miscarriage: Loss of a pregnancy within the first 12 weeks of gestation.

Cervical block: Intracervical local anaesthetic infiltration to the level of the internal os.

5. DUTIES AND RESPONSIBILITIES

The service will be led by **Mr M Shahin**, Consultant in Obstetrics and Gynaecology.

The service will be delivered by trained competent gynaecology doctors.

5.1 Gynaecology medical staff

Doctors will select suitable patients and provide them with a Patient Information Leaflet for MVA under Local anaesthetic and document this in the medical notes.

Complicated pregnancies are discussed with the **consultant** who will be performing the MVA before booking.

Written informed consent for the MVA should be taken by the doctor who lists the patient if they are competent to do so or by the performing surgeon (see Sample Consent Form – Appendix-1).

Patient will be checked by consultant on EPU prior to the MVA procedure to explain the procedure, obtain/confirm written consent for MVA and histological confirmation (Form B2), complete **VTE risk assessment** and **WHO Surgical Safety Checklist**.

All doctors who perform the MVA should be trained and signed off as competent before they perform the procedure independently following Trust guidelines.

Doctors to prescribe pre-operative and discharge medications and complete Operation notes.

5.2 Nurses in EPU

EPU nurse will discuss treatment options available, offer MVA the local anaesthetic as one of the options for the management of miscarriage, explain what to expect during and after the procedure and provide MVA Patient information leaflet.

Booking of patients for MVA procedure is coordinated by EPU staff. They ensure availability of clinician and book the MVA procedure according to EPU workload and available appointment slots.

EPU nurse will clerk the patient, ensure that **FBC** and **Group & Save** has been sent, and complete form B2 with the patient.

One trained nurse **and/or** one trained health care assistant is required with the doctor who performs the MVA under local anaesthetic.

EPU staff will complete the **WHO Checklist**, then position the patient on the couch then stand beside her to offer support (**Vocal Local**).

EPU staff will be trained in the setup of the equipment, maintaining a sterile field and in the handling of products of conception, then will work from the working trolley providing necessary assistance to the clinician.

The EPU Staff will assist and monitor patient observations (NEWS) after the procedure and provide the prescribed medications.

The EPU staff will offer **MVA Patient satisfaction questionnaire** for the patient to complete after the procedure.

6. PROCEDURES

6.1 Service Provision & Training

The operational policy will be delivered in EPU.

All doctors who perform the LA MVA should be trained and signed off as competent before they perform the procedure independently following Trust guidelines (with a log kept of all trained doctors)**.**

Nursing staff in EPU will be trained in the setup of the equipment, maintaining a sterile field and in the handling of products of conception.

6.2 MVA Package

1. Outpatient setting (EPU).
2. Manual Vacuum Aspirator.
3. Local anaesthesia.

This guideline is about the whole MVA package, however, in special circumstances, this package can be partially applied if necessary and agreed with consultant.

6.3 Referral Criteria

Patients will enter the system as they do now with appointments via EPU or when attending to the SAU.

Where clinically appropriate, offer all women undergoing surgical management of miscarriage a choice of: (2, modified)

Manual vacuum aspiration under local anaesthetic in an outpatient or clinic setting (preferably) **or**

Surgical management under general anaesthetic in a theatre (if there is a strong patient preference).

Provide **oral and written information** to **all** women undergoing surgical management of miscarriage about the treatment options available and what to expect during and after the procedure.

Inclusion Criteria

• Miscarriage / Non-viable pregnancy diagnosed before completing 12 weeks of gestation, including missed or incomplete miscarriage as confirmed by ultrasound.

• Retained products of pregnancy after a miscarriage or delivery.

• Pregnancy of unknown locations / Possible ectopic pregnancy in selected cases after careful counselling.

Telephone contact for the patient and next of Kin by landline or mobile.

When those patients are seen in EPU/SAU/MAU, provide a **Patient Information Leaflet** for MVA under Local anaesthetic and document this in the medical notes.

Consent can be taken by the doctor who lists the patient if they are competent to do so or by the performing surgeon. Written consent taken for MVA (Appendix-1) and also for histological confirmation (Form B2).

Blood tests will be taken for **FBC** and **Group & Save**.

Exclusion Criteria and Contraindications

MVAs should generally be booked for *uncomplicated pregnancies* after consultation with the consultant.

MVA is contraindicated for gestations beyond 12+0 weeks (CRL> 50 mm) or if allergy to local anaesthetic drugs (unless patient declines use of local anaesthesia).

The MVA procedure is generally not suitable if patient will be alone at home or if there is significant language/auditory/speech difficulties which could compromise clear telephone communication with the patient.

There are *no known specific contraindications*, but complicated pregnancies should be discussed with the consultant who will be performing the MVA before booking. ***One option is to consider performing MVA under Local anaesthetic in Operating theatre. These include (This list is not exhaustive):***

- Septic miscarriage / Molar Pregnancy.
- Uterine anomalies / Multiple Fibroids / Previous Cervical knife cone treatment.
- Complex medical or mental health problems.
- Haemorrhagic disorder or receiving anticoagulants.
- Under 18 years old.

MVA can be used in Pregnancy of unknown locations / Possible ectopic pregnancy in selected cases after careful counselling.

If the patient is **bleeding heavily**, there needs to be a discussion with the on-call consultant for gynaecology regarding whether the patient can have the MVA immediately, transfer to theatre or wait for the next MVA slot.

6.4 Patient Selection/Counselling

Well informed patients are likely to be less anxious and perceive less pain.

6.5 Consent

1. Consent for the examination of products of conception should be taken as per Trust consent guidance: (Form B2).

2. Written informed consent for the MVA should be taken, stating the same risks as an Evacuation of Retained Products with the following additional risks (see Sample Consent Form: Appendix-1):

- Discomfort & pain during the procedure.
- Transfer to theatre for General Anaesthetic.

Anaesthesia and sedation for surgical Management of Miscarriage: [(1)]

For women who are having surgical management, consider local anaesthesia alone, conscious sedation with local anaesthesia, deep sedation or general anaesthesia. To help women make an informed choice, discuss the options with them and explain that:

- Having local anaesthesia alone means they will be able to spend less time in hospital
- Intravenous sedation plus local anaesthesia will help if they are anxious about the procedure
- With deep sedation or general anaesthesia they will not usually be aware during the procedure (NICE 2019)

6.6 Booking of Women for an MVA Procedure

Women will be booked by EPU Staff once the patient chooses this option.

EPU Staff to book appointments as available as agreed with MVA lead and inform the consultant who is doing that session.

Scheduled outpatient MVA procedures will be booked during the EPU working hours.

6.7 Patient Assessment and Treatment Plan

Patients is assessed by EPU Staff and the Gynaecology SpR on-call when necessary.

Investigations for MVA under LA

- FBC
- Group & Save

6.8 Preoperative preparation and Analgesia prescription

No fasting is required pre-operatively

Doctor to prescribe pre-operative medication of:

1. **Misoprostol*:** 400 micrograms sublingual misoprostol given 1 hour before the MVA or 400 micrograms vaginal misoprostol given 1-3 hours before the MVA (for cervical ripening).
2. **Ibuprofen MR 1600 mg** orally 1 hour before the MVA procedure.
3. **Co-codamol 30/500 mg** orally 1 hour before the procedure.
4. **Metoclopramide 10 mg** orally STAT (if required) 1 hour before the MVA.

Doctor to complete discharge medications (TTOs) – See later.

* If misoprostol cannot be used, consider cervical priming with **Mifepristone 200 mg** orally given 24 to 48 hours before the procedure. [(1)]

** Misoprostol is particularly useful in those who have had minimal vaginal bleeding, primiparous, missed miscarriage, gestations over 10 weeks, previous cervical surgery.*

**** Use of misoprostol for cervical priming is unlicensed. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented.*** [(1)] (NICE 2019)

6.9 MVA Room and Environment

Multipurpose procedure room that is quiet, relaxing and comfortable. Health care staff who are: Calm, friendly, empathetic, gentle and unhurried, attentive to the woman, listen to her and make her needs their first priority and respectful of the woman's privacy and confidentiality.

6.10 MVA staffing

One trained nurse and/or one trained health care assistant is required with the doctor who performs the MVA under local anaesthetic.

Nursing Support (Vocal Local): Women often feel nervous about undergoing uterine evacuation, and their anxiety aggravates their perception of pain. Conversely, women who feel less anxious are less likely to perceive pain. Hence, one nurse/assisting staff is required – important that the patient's attention is diverted during the procedure.

6.11 Procedure for MVA under Local anaesthetic

Suggested contents of an MVA Pack:

1. Patient information leaflet: Miscarriage Options.
2. Patient information leaflet: MVA under LA.
3. Patient information leaflet: Sensitive disposal of pregnancy tissue.
4. B2 Non-viable Fetus (NVF) Consent
5. Consent form (including WHO surgical safety Checklist).
6. Blood tests request.
7. Prescription Sheet (+VTE Risk Assessment).

8. Procedure notes.
9. Histology Card.
10. Patient feedback questionnaire.
11. RCOG Sample Consent form (Laminated).
12. Emergency Protocol (Laminated)

Equipment list (to be checked before Procedure):

2 x Inco-pads. One to put under patient's buttocks. One to put into the treatment couch's bowl.

1 x Sheet to cover lap of the patient whilst in lithotomy.

1 x Trolley with two shelves. Clean the two layers of the trolley.

Preparation (to be done once patient undressed and in lithotomy):

Non-sterile assistant - when prompted:

o Attach a dental needle to the dental syringe in the surgeon's hand.

o Open the MVA syringe and the cannula size asked for by the performing clinician.

Working Trolley Preparation: ***(Top shelf) – MVA Pack***	**Additional Preparation:** ***(Bottom shelf)***
Open MVA pack in tray maintaining a sterile field. Open following instruments and place into sterile field (in order): • Sponges/Cotton wool balls (Counted) • Pour Unisept into a gallipot • Lubricating gel • Cusco Speculum * • Dental syringe * • Vials of local anaesthetic x 3 • Sponge holder x 1 • Single-toothed Volsellum x1 • Hagar dilators (Set of Hagar's dilators size 4-10) • MVA syringe IPAS 60 mls • Kidney Dish • Sterile gloves* (Check size with surgeon)	• MVA cannulas size 6-12 • Dental needle • Additional Long Dental syringe • Additional Long Dental needle • Additional Vial of LA x 1 • Polyp forceps x 1 • Volsellum Forceps x 1 • Additional MVA syringe IPAS 60 mls

***Discuss with the doctor the size/number.**

The clinician will give instructions for any additional instruments to be opened (eg additional Local anaesthetic, dilators or cannulas).

MVA Procedure

- The MVA is mostly performed in one of the EPU rooms using a cervical block with local anaesthetic according to this Trust Clinical Guideline.
- Patient will be admitted to EPU, checked by consultant, introduced to the team and taken to get changed. A patient sticker is put in the clinic diary and time noted.
- An initial set of observations (pulse and blood pressure) should be taken and recorded in the patient notes.
- The patient should be asked to void shortly before the procedure; urinary bladder catheterisation is not recommended.
- The patient should be allowed some privacy to remove her underwear, undress from the 'waist down' or be provided with a gown, whichever is her preference.
- The patient should be assisted onto the treatment couch and her legs put into the supports, the hips should be flexed to about 45° and care should be taken in maintaining symmetry of leg positions.
- The patient should be kept covered until the doctor is ready to proceed.
- In cases of known uterine anomaly, large fibroids, or an ante-retroflexed uterus, the use of continuous ultrasound guidance during the procedure may be helpful.
- WHO Checklist is completed. Once the patient is positioned on couch, the EPU nurse will stand beside her to offer support. Then EPU nurse will work from the working trolley providing necessary assistance to the clinician.
- Entonox will be available to the patient throughout the procedure.
- 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.
- Insert the speculum, visualise and clean the cervix. Maintain Aseptic and non-touch technique with gentle operative technique.
- Perform an Intra-cervical block using local anaesthetic (e.g. Mepivicaine or Plain Scandonest 3%) using a dental syringe deep at the cervical isthmus level – 3 at 12, 2,4,6,8 and 10 o'clock positions i.e. total of 6.6. mls (3 Vials). Use single tooth volsellum to stabilize the anterior lip of cervix.
- Inject slowly to decrease pain of injection. Inject to a depth of 1-1.5 inches as this has been found to be more effective than superficial injections.
- Assess the need to dilate the cervix. If dilatation is necessary (when the cervical canal will not allow passage of cannula appropriate to the uterine size), the cervix should be dilated to the minimum necessary to insert a cannula of the appropriate size. Avoid dilation and cannula sizes greater than size 8 mm where possible.
- The appropriate cannula and aspirator should be chosen. Typically, the size of the cannula used would match the gestational age or uterine size in weeks. However, experienced practitioners are often able to successfully and

completely evacuate the uterus with cannula of smaller diameter; this may avoid the need for cervical dilation and may be more comfortable for the client.

- Insert the cannula gently through the cervix into the uterine cavity, just passed the internal os; rotating the cannula with gentle pressure often helps ease insertion.
- Attach the charged 60ml self-locking syringe to the cannula. Make sure that the cannula does not move forward into the uterus as you attach the syringe. Alternatively, treatment doctors may attach the syringe to the cannula before inserting the cannula into the cervical os.
- Never grasp the syringe by the plunger arms after the syringe has been charged.
- Advance the cannula until it gently touches the fundus and then withdraw it slightly.
- Open the valve(s) so that the vacuum is applied to the uterine cavity. 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.
- Withdrawing the cannula apertures beyond the cervical os will cause the vacuum to be lost. If the cannula becomes clogged and must be removed and cleared or if it passes the os accidentally, the aspirator must be emptied and "recharged".
- Dispose of the products into the kidney bowl. Recharge the aspirator and repeat the evacuation process until complete aspiration. Can take between 3-5 passes. It is sometimes more efficient to have more than one 'charged' aspirator available for use, particularly at higher gestations.
- **4 Signs of a complete aspiration:** No further tissue is seen passing through the cannula, 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.
- Typically, the MVA procedure takes a few minutes using a gentle operative technique, during which most women will usually experience moderate period-like cramps that tends to increase when the uterus contracts at the end of the evacuation (of which she will be made aware of at time of consent). Cramping usually settle quickly after the procedure.
- Sharp curettage is generally not indicated and is not routinely recommended following MVA. There is no need to give an oxytocic in most cases.
- It is important that the procedure is completed in its entirety and, therefore, keeping the patient talking/providing distraction during this time is vital. However, the nurse will assess the patient's ability to tolerate the discomfort and act as the patient's advocate, communicating this with the clinician and team.
- The products retrieved are placed into histology pot. If the products/histology pot is to be sent to the histopathology department it **MUST** be sent with the appropriate consent form (form B2, already signed in patient's notes). If the patient does not wish for histological assessment (no consent) the products must be disposed of as per Trust Policy.

- Bar codes stickers from all instruments used/opened must be stuck into the patient's notes.
- All trays and reusable instruments should be repackaged and returned to HSDU for re-sterilisation.
- Nursing/clinicians documentation is completed in patient notes and entry made in clinic diary of procedure.
- **<u>If concerned that perforation has occurred, then:</u>**
  o STOP procedure immediately.
  o Call for help (another medical person e.g. Consultant Gynaecologist or senior gynaecology registrar). Consider anaesthetist attendance.
  o Manage and observe Airway, Breathing and Circulation as appropriate ensuring oxygenation, venous access and IV fluid administration as a minimum.
  o Make urgent arrangements for transfer to theatre for laparoscopy, +/- laparotomy and completion of evacuation under direct vision.

6.12 Post-operative Care after the MVA procedure

The patient is assisted with personal hygiene and when ready can go back to one of the EPU Clinical Rooms.

The patient and observations are monitored for up to an hour after the MVA procedure and allowed to eat and drink if she wishes. Analgesia may be given as necessary.

Patient will be offered an **MVA Patient satisfaction questionnaire** to complete.

If patient remains stable and comfortable, she will be allowed home. Most patients will be ready to be discharged within 1 hour of MVA, provided with discharge medications.

Although patients may be able to drive home on the same day, it is recommended that someone pick her up and drives her home after the procedure.

The patient is advised to rest for the remainder of the day and can return to work after 48 hours, or when she feels ready to.

They are expected to have some vaginal bleeding and cramps after the MVA. This usually settles within two to four weeks. Advice the patient to use sanitary towels instead of tampons and to avoid sexual intercourse **for at least one week or** until the bleeding has settled to reduce the risk of infection.

Should the patient become haemodynamically unstable or experience heavy vaginal bleeding, the **Oncall Gynaecology Registrar** or **the consultant** should be informed to review the patient and if necessary, consider transfer to the Surgical Assessment Unit (SAU) or CEPOD in accordance with the existing emergency care pathways.

Discharge Medications

Discharge Medications (TTO's) – if no known allergy:

Oral Co-codamol 8/500 mg (OTC) or 30/500 mg, PRN 4-6 hourly for up to 3 days.

Oral Ibuprofen 400mg PRN 8 hourly for up to 3 days (Start after the day of MVA).

Oral Doxycycline 100 mgs Twice a day for 3 days. [(1)] (NICE 2019).

Anti-D prophylaxis: Offer anti-D prophylaxis to all women who are rhesus D negative after 10+0 weeks' gestation. Consider anti-D prophylaxis for women who are rhesus D negative and are having an MVA up to and including 10+0 weeks' gestation. [(1)] (NICE 2019)

Venous thromboembolism prophylaxis: For women who need pharmacological thromboprophylaxis, consider low-molecular-weight heparin (LMWH) for at least 7 days after the MVA. For women who are at high risk of thrombosis, consider starting LMWH before the procedure and giving it for longer afterwards. [(1)] (NICE 2019)

Patient Discharge / Follow up

On discharge the patient is advised to report if she experiences heavy vaginal bleeding, severe abdominal pain, fever, offensive vaginal discharge or if she has any concerns by contacting EPU **(01782 672110),** her local GP, out of hours GP, Call **111**, NHS direct **0845 4647** or attending to accident and emergency (A&E) department or call **999** in the event of an emergency.

Advise the patient to do a urine pregnancy test 3 weeks after the procedure. If it is positive, she is advised to contact the EPU with the result to consider arranging a rescan appointment to ensure no retained products of conception.

A database of all MVA procedures will be prospectively kept for assessing feasibility, efficacy and patient satisfaction for audit / research purposes.

7. REVIEW, MONITORING AND REVISION ARRANGEMENTS

- Key stakeholders in the guideline will be asked to evaluate the service a minimum of 3 months following implementation of the initial clinic or sooner if clinic capacity becomes an issue.
- If difficulty is experienced due to lack of capacity, the Directorate will examine feasibility of increasing the service.

These guidelines will be reviewed as a minimum every 3 years or more frequently if national/local guidance or legislation requires revision at an earlier date.

Monitoring	Method	Frequency	Lead	Reporting to	Action Plan Review by
Patient Satisfaction	Patient Survey	Annual	Consultant Lead	Directorate Governance team	Directorate Governance team
Review of capacity and service provision	Audit capacity and waiting times	Annual	Consultant Lead	Gynaecology Directorate	Gynaecology Directorate

8. ASSOCIATED DOCUMENTS & APPENDICES

- **Appendix (1):** Sample Consent form (From RCOG consent advice).
- **Appendix (2):** Patient information Leaflet: MVA under Local Anaesthetic.
- **Appendix (3):** Patient feedback questionnaire.
- **Appendix (4):** Procedure notes.
- **Appendix (5):** Set up for MVA under Local anaesthetic
- **Appendix (6):** Emergency Protocol for acute collapse.

9. REFERENCES

1. Abortion Care, NICE Guideline (NG140), September 2019 (https://www.nice.org.uk/guidance/ng140).
2. Ectopic pregnancy and miscarriage: diagnosis and initial management - NICE guidelines [CG154] Published date: December 2012 – April 2019
3. Birmingham Women's NHS Foundation Trust Surgical Management of Miscarriage Under local Anaesthetic operational Policy 2011.
4. RCOG Consent Advice: Surgical Management of Miscarriage and Removal of Persistent Placental or Fetal Remains. Consent Advice No. 10 (Joint with AEPU). January 2018

APPENDIX (1): SAMPLE CONSENT FORM

Name of proposed procedure or course of treatment (include brief explanation if medical term not clear):		
Manual Vacuum Aspiration (MVA) under Local Anaesthetic: Surgical Procedure to remove pregnancy remains from within the uterus (womb).		
Statement of health professional (to be filled in by health professional with appropriate knowledge of proposed procedure, as specified in consent policy): *(Preferably capable of performing procedure themselves)*		
I have explained the procedure to the patient with other possible alternatives. In particular, I have explained:		
The cervix (neck of the womb) may need to be dilated (opened) and the pregnancy remains removed. Tablets or pessaries may be given first to make the cervix softer and the operation safer. Alternatives include having the procedure under a general anaesthetic (put asleep) or having tablets alone (Medical management) or to wait for the pregnancy to pass naturally (Conservative management).		
The intended benefits:	*Details of intended benefits explained:* To remove any pregnancy remains from within the womb.	
Significant, unavoidable or frequently occurring risks:	*Significant, unavoidable or frequently occurring risks explained:* **Frequent risks:** □ Discomfort & Pain during and after the procedure (common). □ Side effects of medications, reaction to Local anaesthetic (rare) □ Bleeding that lasts for up to 2 weeks is very common but heavy bleeding is uncommon (1–3 in 1000 women). □ Failure / Need for repeat procedure if all the pregnancy remains are not removed, up to 40 in 1000 women (common). □ Pelvic infection, 40 in 1000 women (common). □ Development of intrauterine adhesions, 190 in 1000 (common). **Serious risks:** □ Perforation of the womb, up to 1 in 1000 women (uncommon). □ Significant tear of the neck of the womb, less than 0.1 in 1000 women (rare).	
Any extra procedures which may become necessary during the procedure:	√	**Blood Transfusion**
	√	**Other procedure (Please Specify in the space below):**
	Details of any extra procedures which may become necessary during the procedure: □ Repair of cervical laceration. □ Transfer to theatre for General Anaesthetic. □ Laparoscopy (keyhole surgery) to investigate for any suspected injury, if there is perforation of the womb. □ Laparotomy (open surgery) to repair any injury.	
I have also discussed what the procedure is likely to involve, the benefits and risks of any available alternative treatments (including no treatment) and any particular concerns of this patient.		
The following Patient information leaflet has been provided:	*Name of the leaflet / tape provided, including version numbers/reference:* □ Manual Vacuum Aspiration (MVA) under Local Anaesthetic. □ Treatment options for miscarriage.	
The procedure will involve:	√	**Local Anaesthesia**

Appendix (3): Patient feedback questionnaire.

Adapted from BSGE

Manual Vacuum Aspiration (MVA) - Patient Satisfaction Survey

We would appreciate your comments on the service you received today to help improve our services. This data will also be used to improve our service. The answers you provide will be anonymous, completely confidential and your participation is voluntary. If you have any questions about this survey please ask a member of staff.

Thank you for your help

Before your consultation					
Did you receive any written information (e.g. a leaflet or instructions about where to acquire information e.g. on-line) prior to your appointment?			Yes ○	No ○	
Did you feel that the information was clear and understandable? (leave blank if you answered "No" to the question above)	Yes – I knew what to expect ○	Yes- to some extent ○	Not too sure ○	No- wish I knew what to expect ○	No- it was not useful ○
Did you receive advice to take painkillers before the appointment?	Yes – took some ○	Yes – did not take any ○	No– wish I had ○	No – no need ○	
What did you think of the waiting area, reception and facilities?	Excellent ○	Very Good ○	Good ○	Fair ○	Poor ○

About your consultation today					
Staff explained things in a way I could easily understand.	Strongly Agree ○	Agree ○	Neither Agree or Disagree ○	Disagree ○	Strongly Disagree ○
I felt able to ask questions and to Discuss any worries	Strongly Agree ○	Agree ○	Neither Agree or Disagree ○	Disagree ○	Strongly Disagree ○
I was offered an opportunity to discuss pain relief.	Strongly Agree ○	Agree ○	Neither Agree or Disagree ○	Disagree ○	Strongly Disagree ○
My questions were answered to my satisfaction.	Strongly Agree ○	Agree ○	Neither Agree or Disagree ○	Disagree ○	Strongly Disagree ○
I felt involved in the decisions regarding my care.	Strongly Agree ○	Agree ○	Neither Agree or Disagree ○	Disagree ○	Strongly Disagree ○
I was treated with respect and dignity.	Strongly Agree ○	Agree ○	Neither Agree or Disagree ○	Disagree ○	Strongly Disagree ○
I was given enough privacy.	Strongly Agree ○	Agree ○	Neither Agree or Disagree ○	Disagree ○	Strongly Disagree ○
All aspects of my care were dealt with confidentially.	Strongly Agree ○	Agree ○	Neither Agree or Disagree ○	Disagree ○	Strongly Disagree ○
The staff were courteous and polite.	Strongly Agree ○	Agree ○	Neither Agree or Disagree ○	Disagree ○	Strongly Disagree ○
I was given advice regarding my recovery and management plan	Strongly Agree ○	Agree ○	Neither Agree or Disagree ○	Disagree ○	Strongly Disagree ○

Manual Vacuum Aspiration (MVA) - Patient Satisfaction Survey

Your experience (considering your expectations of today's consultation)					
Did you feel distressed?	Not at all ○	Slightly ○	Somewhat ○	Mostly ○	Constantly ○
Did you feel pain?	Not at all ○	Slightly ○	Somewhat ○	Mostly ○	Constantly ○
Did you feel in control?	Not at all ○	Slightly ○	Somewhat ○	Mostly ○	Constantly ○
Did you feel embarrassed?	Not at all ○	Slightly ○	Somewhat ○	Mostly ○	Constantly ○
Did you feel anxious?	Not at all ○	Slightly ○	Somewhat ○	Mostly ○	Constantly ○
Did you feel faint?	Not at all ○	Slightly ○	Somewhat ○	Mostly ○	Constantly ○

Your overall experience					
Overall, how was your experience of our service?	Excellent ○	Good ○	Fair ○	Poor ○	Very Poor ○
I would choose this way of having the procedure if I were in the same situation again?	Strongly Agree ○	Agree ○	Neither Agree or Disagree ○	Disagree ○	Strongly Disagree ○

Please indicate (✓) what would be the worst level of discomfort or pain you might experience (or used to experience) <u>during a period</u> on the same scale of 0-10:

0	1	2	3	4	5	6	7	8	9	10
No Pain					**Moderate pain**					**Worst pain**

Please indicate (✓) what level of <u>discomfort or pain you experienced</u> during the procedure on a scale of 0-10:

0	1	2	3	4	5	6	7	8	9	10
No Pain					**Moderate pain**					**Worst pain**

Please indicate (✓) How would you *<u>rate the care</u>* you received? On the same 0-10 scale:

0	1	2	3	4	5	6	7	8	9	10
Bad					**Neither good nor bad**					**Excellent**

Any further comments on your experience or suggestions for improvement?

Gestational age/Uterine Size	____ / ____	Cervix open/Dilator size	____ / ____
Misoprostol given (when)	Yes / No (_____)	Duration of Procedure	____ min
Analgesia given (when)	Yes / No (_____)	Estimated Blood loss	____ ml
LA Used (number)	Yes / No (_____)	Additional analgesia	____

Appendix (4): Procedure Note

Department of Obstetrics & Gynaecology

University Hospital of North Midlands

Operation note

Date: ... / ... / .....

Name: **NHS :**
Hospital Number : **DoB :**

Procedure:
Manual Vacuum Aspiration (MVA) under Local Anaesthetic for Surgical Management of Miscarriage

Antibiotics: None

Indications: Missed / Incomplete Miscarriage.

Patient in lithotomy position. Consent confirmed and checked identity. Clean and draped.

EUA: Anterverted / Retroverted Soft / Firm uterus, weeks size. Normal Cervix. Normal Vulva and vagina.

Procedure:
Aspetic and non-touch technique.
A cervical block with local anaesthetic (Mepivicaine) infiltration of the cervix deep at the cervical isthmus level – 3 at **12, 2, 4, 6, 8 and 10** o'clock positions i.e. total of mls. A single tooth volsellum used to stabilize the anterior lip of cervix. The cervix gradually and gently dilated to mm using Hegar's dilator. Gentle operative technique - well tolerated. Suction of uterine contents and products of conception complete using size Karmen cannula. Procedure complete, no further products. Minimal Bleeding. No cervical lacerations or uterine trauma. EBL= minimal. Specimens to Histology.

Post-Operative Comments:
1- Routine Care. Can go home when ready.
2- Send Specimen to Histology.
3- Non-viable fetus (NVF) B2-Form complete ☐.
4- Rhesus Positive / Negative: Need for Anti-D: Indicated / Not indicated
5- TTO's: Co-codamol 8/500 mgs, Ibuprofen 400mgs, Doxycycline 100 mgs
6- Aware of risks of bleeding/infection/incomplete … etc and TCI if concerns.
7- Patient might wish to have a home urine pregnancy test in weeks.

Signed _____

Operation Note

APPENDIX (5): Set up for MVA under Local anaesthetic

Equipment list (to be checked before Procedure):

2 x Inco-pads. One to put under patient's buttocks. One to put into the treatment couch's bowl.

1 x Sheet to cover lap of the patient whilst in lithotomy.

1 x Trolley with two shelves. Clean the two layers of the trolley.

Working Trolley Preparation

(Top Shelf): Open MVA pack in tray maintaining a sterile field. Open following instruments and place into sterile field (in order):

- Sponges/Cotton wool balls (Counted)
- Pour Unisept into a gallipot
- Lubricating gel
- Cusco Speculum *
- Dental syringe *
- Vials of local anaesthetic x 3
- Sponge holder x 1
- Single-toothed Volsellum x1
- Hagar dilators (Set of Hagar's dilators size 4-10)
- MVA syringe IPAS 60mls
- Kidney Dish
- Sterile gloves* (Check size with surgeon)

(Lower Shelf): Place all other items into the lower shelf:

- MVA cannulas size 6-12
- Dental needle
- Additional Long Dental syringe
- Additional Long Dental needle
- Additional Vial of local anaesthetic x 1
- Polyp forceps x 1
- Volsellum Forceps x 1
- Additional MVA syringe IPAS 60mls

Preparation (to be done once patient is in lithotomy):

Non-sterile assistant - when prompted:

o Attach a dental needle to the dental syringe in the surgeon's hand.

o Open the MVA syringe and the cannula size asked for by the performing clinician.

***Discuss with the doctor the size/number.**

The clinician will give instructions for any additional instruments to be opened (eg additional Local anaesthetic, dilators or cannulas).

Appendix (6): Emergency Protocol for acute collapse.

University Hospitals of North Midlands NHS
NHS Trust

Assess ABCDE
Lie Flat
Administer Oxygen therapy
Get emergency Trolley

Call for HELP
Oncall Registrar
Oncall Consultant
or 2222

Emergency Protocol for Acute Collapse (Outpatient Setting)

Haemorrhage

Adminster
IM Syntometrine
IV Trenaxemic Acid
1 g

IV Access
Blood
IV Fluids

Bimanual compression of the uterus
Consider **Foley's Catheter** +/-
Vaginal pack

Consider
Urgent Transfer to Theatre for
EUA/ERPOC as CEPOD E-1, inform:
Theatre coordinator
Oncall anaesthetist

Arrange XM blood

Anaphylaxis
e.g. Stridor, SOB

STOP any agent immediately
Give IM Adrenaline
0.5 ml
(Dose 1:1000)

IV Access
IV Fluid Challenge

If no improvement after 5 mins
Give further dose of IM Adrenaline
(Dose 1:1000)

Consider
Chlorphenamine 10 mg
Hydrocortisone 200 mg
(Either IM or slow IV)

Local Anaesthetic Toxicity

Sudden loss of consciousness. Cardiovascular collapse.

STOP any agent immediately
(but may occur sometime after injection)

Start CPR following BLS guidelines.

IV access

Consider treatment
Lipid Emulsion
Intralipid 20%
1.5 ml.kg-1 over 1 min

Faint

Conservative measures

Recovery Position
Monitor

At the END

- **Debrief Patient**
- **Debrief Family**
- **Debrief Staff**
- **Document**
- **Datix Reporting**
- **Restock Trolly**
- **Inform GP**
- **Inform ward manger**

Profound Bradycardia: (Vagal Reflex to cervical stimulation):
- If persists give Atropine 300 microgram IV, can be repeated 3 times until desired pulse rate is achieved (total dose 1.2 mg).
- If complete sinus arrest occurs, call the CRASH team.