

# Manual Vacuum Aspiration

## Comprehensive Abortion Care

# TRAINEE REFERENCE GUIDE

Version 1.0

## Acknowledgements

---

© WomanCare Global

### **This Reference guide has been adapted from the following sources**

Clinical practice handbook for quality abortion care. Geneva: World Health Organization; 2023.

<https://iris.who.int/bitstream/handle/10665/369488/9789240075207-eng.pdf?sequence=1>

Abortion care guideline. Geneva: World Health Organization; 2022.

<https://iris.who.int/bitstream/handle/10665/349316/9789240039483-eng.pdf?sequence=1>

Best Practice in Post Abortion Contraception Royal College of Obstetricians and Gynaecologists, September 2022

<https://www.rcog.org.uk/media/53fhrbz2/post-abortion-contraception-best-practice-paper-2022.pdf>

Best Practice in Abortion Care, Royal College of Obstetricians and Gynaecologists, April 2022

<https://www.rcog.org.uk/guidance/browse-all-guidance/best-practice-papers/>

Ipas Resources, Guidelines and videos

<https://www.ipas.org/resource/abortion-care-videos/>

Ectopic pregnancy and miscarriage: diagnosis and initial management NICE guideline [NG126] November 2021

<https://www.nice.org.uk/guidance/ng126>

World Health Organization Department of Reproductive Health and Research (WHO/RHR) and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP), Knowledge for Health Project.

Family Planning: A Global Handbook for Providers (2018 update). Baltimore and Geneva: CCP and WHO, 2018.

<https://www.who.int/publications/i/item/9780999203705>

World Health Organization Medical eligibility criteria for contraceptive use -- 5th ed. 2015

<https://www.who.int/publications/i/item/9789241549158>

## CONTENTS

---

Introduction.....	2
Overview of abortion .....	4
WhatisMVA?.....	6
Counselling and informed consent .....	9
PreMVA.....	11
Procedurecare.....	12
MVAProcedure.....	14
PostMVAprocedure.....	20
Appendix.....	24

# INTRODUCTION

Welcome to the DKT WomanCare Global Reference Guide for Manual Vacuum Aspiration for comprehensive abortion care. This has been developed as part of our standardized training program for abortion and family planning services.

The MVA training programme has three components:

- This reference guide, which serves as a background for the course and an introduction to Ipas MVA equipment.
- A Trainer Guide – group training reference guide and slide pack.
- A knowledge test which is not assessed.

These programmes are based on evidence-based recommendations for provision of MVA services up to 12 completed weeks of pregnancy.

## Who is this guide for?

---

This content is designed for all individuals who are involved in provision of care of women seeking abortion services. This includes:

- **Clinical staff** who will become providers of MVA services (mid-level providers, nurses, midwives, pharmacists) who can be assessed as competent as part of the course.
- **Non-clinical team members** such as managers, sales teams, distributors, as well as those from the public sector and other NGOs can also benefit from the theory and practical training, so that they can fully understand what MVA service provision entails.

This is all to ensure services provided are safe, effective and patient-centered care and of the highest quality as per organizational mission and vision.

## RIGHTS-BASED APPROACH

Abortion should be available on the request of woman or girl. DKT WomanCare Global is committed to the principles of right's based, person-centered care delivered in an enabling environment where there is respect for human rights, a supportive framework of law and policy, availability and accessibility of information within a supportive health system.

Box 1: General Principles of Right's based Abortion Provision.  
WHO, Abortion Care Guidelines 2022



Sexual and reproductive health and rights are grounded in a range of human rights recognized and guaranteed in national and international law



States have a duty under international human rights law to ensure that the regulation of abortion does not cause women and girls to resort to unsafe abortions



States must provide essential medicines listed under WHO's Action Programme on Essential Drugs



Treaty monitoring bodies have called for the decriminalization of abortion in all circumstances



Regardless of whether abortion is legal or restricted, States are required to ensure access to post-abortion care

## Overview of abortion

Comprehensive abortion care services are an essential component of sexual and reproductive health services. Strengthening access to comprehensive abortion care within the health

system is fundamental to meeting the Sustainable Development Goals (SDGs) relating to good health and well-being (SDG3) and gender equality (SDG5).<sup>1</sup>

## Definition of terms



**Comprehensive abortion care (CAC)** includes not just information and management of induced abortion, but provision of information and management of care related to pregnancy loss and *post-abortion care (PAC)*.



**Post-abortion care** is the provision of services after an abortion, such as contraceptive services and linkage to other needed services in the community or beyond. It can also include management of side-effects or complications after a safe or unsafe abortion or miscarriage including resuscitation, blood transfusion, uterine evacuation, genital tract repair and treatment of infection.



**Unsafe abortion** refers to abortion when it is carried out by a person lacking the necessary skills or in an environment that does not conform to minimal medical standards, or both.



**Miscarriage (spontaneous abortion or early pregnancy loss)** is the spontaneous loss of a pregnancy before the fetus is usually viable outside the uterus. The clinical signs of miscarriage are vaginal bleeding, usually with abdominal pain and cramping. If the pregnancy has been expelled, the miscarriage is termed “complete” or “incomplete” depending on whether tissues are retained in the uterus.



**Surgical aspiration.** This involves evacuation of the contents of the uterus through a cannula, attached to a vacuum source. Electronic vacuum aspiration (EVA) requires a power supply and manual vacuum aspiration (MVA) in the form of a handheld syringe.



*Induced abortion, spontaneous pregnancy loss and PAC are all valid indications for MVA in pregnancy.*



PAC must be offered to all women under human rights principles regardless of whether abortion is restricted in that setting. All women must be able to access emergency care and contraception.

<sup>1</sup> Abortion care guideline. Geneva: World Health Organization; 2022.

<https://iris.who.int/bitstream/handle/10665/349316/9789240039483-eng.pdf?sequence=1>

## Key facts about induced abortion

There are many myths about abortion, and it is important when counselling women to be clear about giving accurate, high-quality information about risks. These can be summarized from the Clinical practice handbook for quality abortion care, WHO 2023.



Safe abortion has a very low risk of complications (< 1%), thus most women will not suffer any long-term effects on their general or reproductive health



The risk of death from a safe abortion is lower than from an injection of penicillin or carrying a pregnancy to term



Evidence overall does not suggest there is an association between safe abortion and adverse outcomes in subsequent pregnancies



There is no link between safe abortion and any health conditions, such as breast cancer or depression



Negative psychological sequelae occur in a very small number of women and appear to be the continuation of pre-existing conditions, rather than being a result of the experience of induced abortion

# WHAT IS MVA?



MVA is a minor surgical procedure that involves a cannula being inserted into the uterus through the cervix to remove uterine contents with gentle suction using a handheld device (the aspirator).



MVA can be performed under local anesthesia in a hospital or health center. It has a short recovery time and is typically performed on an outpatient basis.



MVA has been used internationally for decades and has been shown to be safe and effective for surgical abortion. It is a safe and effective method up to 12 weeks gestation and is recommended by the world's leading gynecological and obstetric organizations, including FIGO (the International Federation of Gynecology and Obstetrics), as the technique of choice for uterine evacuation. MVA can also be used for endometrial biopsy as part of a wider suite of investigations for abnormal bleeding in non-pregnant women.



MVA is an alternative to medical abortion for uterine evacuation. Comparison between the two methods is shown in Figure 1.



There is no one method of uterine evacuation that is superior; medical abortion and surgical evacuation each have advantages and disadvantages, and it is up to the woman to decide what is best for her, given the local clinical context, resources available and gestation. For example, surgical evacuation has the advantage that it is highly likely to be a one-off intervention that may suit a woman who does not want to keep returning for check-ups or if she wishes to avoid medication. It avoids the uncertainty of when the process of expulsion will be completed.



Figure 1: Comparison of abortion methods and contraindications  
(from Clinical practice handbook for quality abortion care, WHO 2023)

<12 WEEKS OF GESTATION	
MEDICAL ABORTION	VACCUUM ASPIRATION
<ul style="list-style-type: none"> <li>Avoids surgery</li> <li>Mimics the process of miscarriage</li> <li>Controlled by the woman and may take place at home</li> <li>Takes time (hours or days) to achieve successful abortion, and the timing may not be predictable</li> <li>Women experience bleeding and cramping, and potentially some other side-effects (nausea, vomiting)</li> <li>May require more clinic visits or surveillance than vacuum aspiration</li> </ul> <p><i>May be preferred in the following situations:</i></p> <ul style="list-style-type: none"> <li>For severely obese women</li> <li>In the presence of uterine malformations or fibroids</li> <li>Prior cervical surgery</li> <li>For women who want to avoid surgical intervention</li> <li>If a pelvic exam is not feasible or not wanted</li> </ul>	<ul style="list-style-type: none"> <li>Quick procedure and completed in a predictable time</li> <li>Takes place in a health-care facility</li> <li>Successful abortion easily verified by evaluation of aspirated uterine contents</li> <li>Sterilization or placement of an intrauterine device (IUD) may be performed at the same time as the procedure</li> <li>Very small risk of uterine or cervical injury</li> <li>Requires instrumentation of the uterus</li> <li>Timing of abortion controlled by the facility and health worker</li> <li>Can be performed under sedation</li> </ul> <p><i>May be preferred in the following situations:</i></p> <ul style="list-style-type: none"> <li>If there are contraindications to medical abortion</li> <li>If there are time constraints for the abortion</li> </ul>
CONTRAINDICATIONS	
<ul style="list-style-type: none"> <li>Previous allergic reaction to one of the drugs involved</li> <li>Inherited porphyria</li> <li>Chronic adrenal failure</li> <li>Known or suspected ectopic pregnancy (neither misoprostol nor mifepristone will treat ectopic pregnancy)</li> </ul> <p><i>Caution and clinical judgement are required in cases of:</i></p> <ul style="list-style-type: none"> <li>Long-term corticosteroid therapy (including those with severe uncontrolled asthma)</li> <li>Haemorrhagic disorder</li> <li>Severe anaemia</li> <li>Pre-existing heart disease or cardiovascular risk factors</li> <li>An IUD in place (remove before beginning the regimen)</li> </ul>	<ul style="list-style-type: none"> <li>There are no known absolute contraindications</li> </ul> <p><i>Caution and clinical judgement are required in cases of:</i></p> <ul style="list-style-type: none"> <li>An IUD in place (remove before beginning the procedure)</li> </ul>

## Principles of high quality MVA service provision



Any method of induced abortion should be initiated with no delay to reduce risks as pregnancy gestation increases and to increase patient satisfaction. This means that services should be accessible, available and affordable.



Care should be focused on the patient and her needs in a welcoming de-medicalized environment which respects auditory and visual privacy.



Providers should be trained in counselling and be able to provide information in a non-judgmental manner. There must be complete assurance of patient confidentiality.



Counselling should ensure that the patient is able to make an informed choice without coercion. It should include information on the choice of abortion method, possible complications and the need for follow-up especially if complications arise.



There should be well established referral networks to other sexual health services if these are not provided on site.



All aspects of service provision should be documented.



Providers should achieve basic competencies during training and be aware of the limits of their training especially with respect to gestation of pregnancy and refer to other providers where appropriate.

# COUNSELLING AND INFORMED CONSENT

Any information provided to the patient, either written or verbal, must comply with the human rights principles of counselling set out in Box 2.

Box 2: Key considerations relevant to the provision of information (developed from WHO Abortion Care guidelines 2022)

## KEY HUMAN RIGHTS CONSIDERATIONS RELEVANT TO THE PROVISION OF INFORMATION



<ul style="list-style-type: none"> <li>Informed consent requires the provision of complete and accurate, evidence-based information.</li> </ul>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>Accurate information on abortion must be available to individuals in a way that respects privacy and confidentiality.</li> </ul>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>The right to refuse such information when offered must be respected.</li> </ul>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>Abortion information should be available to all persons without the consent or authorization of a third party. This includes abortion information being available to adolescents without the consent or authorization of a parent, guardian or other authority.</li> </ul>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>Information must be non-discriminatory and non-biased and presented in a respectful manner. It should not fuel stigma or discrimination and be in a manner understandable to/tailored to the individual.</li> </ul>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>Dissemination of misinformation, withholding of information and censorship should be prohibited.</li> </ul>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>Information should be acceptable to the person receiving it and of high quality; it should be presented in a way that can be understood.</li> </ul>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>Throughout the process there should be an ongoing assessment of the woman's understanding of the information provided, openness to answer any questions and to confirm whether her decision is being taken voluntarily.</li> </ul>	<input type="checkbox"/>



For MVA specifically, it is essential that the women are counselled on the following:

- Benefits of MVA vs. medical management vs. expectant management
- Risks and complications
- Pain management options and methods of anesthesia
- Explanation of the MVA procedure itself
- What to expect after the procedure
- Taking verbal and written consent

Risks and complications of MVA are rare. High quality information provided to the patient will result in timely management of any problems when they occur

Table 1: Risks and Complications of abortion (from RCOG 2022)

Complication/risk	Medical abortion	Surgical abortion
Continuing pregnancy	1 - 2 in 100	1 in 1000 Higher in pregnancies <7 weeks
Need for further intervention to complete the procedure	<14 weeks: 70 in 1000	<14 weeks: 35 in 1000
Infection*	Less than 1 in 100	Less than 1 in 100
Severe bleeding requiring transfusion	<20 weeks: less than 1 in 1000	<20 weeks: less than 1 in 1000
Cervical injury from dilation and manipulation	-	1 in 100
Uterine perforation	-	1 - 4 in 1000

\*Upper genital tract infection is most commonly associated with pre existing lower genital tract infection at time of procedure

# Pre MVA



MVA compared to EVA and dilation and curettage



It is as effective and acceptable as EVA and may have safety benefits<sup>1</sup>



MVA is affordable and versatile and can be delivered in the outpatient setting by mid-level providers using local anesthesia. This reduces the resources required for hospitalization and costs for women<sup>2</sup>



There is also a reduced risk of complications from general anesthesia or sedation if MVA is performed in the outpatient setting, with a reduced post procedure recovery time<sup>3</sup>



MVA is portable and quiet. It is easily stored in space constrained settings and no electricity is required.



Manual vacuum aspiration should replace the D&C as a uterine evacuation method<sup>3,4</sup>. Sharp curettage performed alone or in combination with vacuum aspiration is significantly more likely to be associated with complications including incomplete abortion than vacuum aspiration used alone<sup>5</sup>



***D&C should be considered obsolete.***

<sup>1</sup> Wen J, Cai QY, Deng F, Li YP. Manual versus electric vacuum aspiration for first-trimester abortion: a systematic review. BJOG. 2008 Jan;115(1):5-13. doi: 10.1111/j.1471-0528.2007.01572.x. PMID: 18053098,

<sup>2</sup> Benson, J., Okoh, M., Krenn Hrubec, K., Lazzarino, M. A., & Johnston, H. B. (2012). Public hospital costs of treatment of abortion complications in Nigeria. International Journal of Gynecology & Obstetrics, 118(2), 60012-60015,

<sup>3</sup> World Health Organization. (2022). Abortion care guideline. World Health Organization. <https://apps.who.int/iris/handle/10665/349316>. License: CC BY-NC-SA 3.0 IGO

<sup>4</sup> FIGO. (2011). Consensus statement on uterine evacuation. Retrieved from <https://www.figo.org/news/figo-consensus-statement-uterine-evacuation>,

<sup>5</sup> Sekiguchi, A., Ikeda, T., Okamura, K., & Nakai, A. (2015). Safety of induced abortions at less than 12 weeks of pregnancy in Japan. International Journal of Gynecology & Obstetrics, 129(1), 54-57.

# Manual Vacuum Aspiration Procedures

## PROCEDURE CARE



As with all surgical procedures, patient consists of taking a medical history and performing a physical examination, including:



Date of last normal menstrual period to establish pregnancy gestation



*Obstetric history* including the numbers of vaginal deliveries, Caesarean sections, ectopic pregnancies, or any other pregnancy losses,



*Gynecology history* should document if there have been any previous abdominal or uterine surgery symptoms of genital tract infection. It is critical to establish and treat any infection prior to instrumenting the uterus



Ask about any *medical conditions* and document if she is on any medications, including any herbal medications. It is important to ask if she has any allergies.



If the woman has had an *ultrasound scan*, note the pregnancy gestation, size of the uterus, and whether it is anteverted or retroverted. If there is no access to ultrasound, a bimanual examination will determine the size and position of the uterus. It is critical to establish the gestational age at this clinical assessment to ensure that a first-trimester MVA procedure will be appropriate and safe.



Women having *uterine evacuation* for any indication less than 12 weeks gestation do NOT require anti-D rhesus prophylaxis if they are Rhesus negative (WHO, 2023)



Women having induced abortion require oral prophylactic antibiotics however the *MVA should not be delayed if supplies are not available.*



Check your local protocols for other investigations such as routine hemoglobin.



### CERVICAL PREPARATION

Prior to surgical abortion, cervical priming (also known as cervical preparation or ripening) may be considered for all women with a pregnancy of any gestational age. However, it is not routinely mandatory for women under 12 weeks as it carries some disadvantages such as discomfort, bleeding in advance of the procedure and additional clinic time. If it is required for women under 12 weeks, the following regimens are recommended<sup>2</sup>:

- Mifepristone 200 mg orally 24–48 hours prior to the procedure or,
- Misoprostol 400 µg sublingually 1–2 hours prior to the procedure or,
- Misoprostol 400 µg vaginally or buccally 2–3 hours prior to the procedure.

Cervical priming is especially beneficial for individuals with the following conditions, to decrease the risk of cervical injury or uterine perforation (which may cause haemorrhage), and the risk of incomplete abortion:

- Cervical anomalies
- Previous surgery to the cervix
- Adolescent age
- Advanced pregnancy.

<sup>2</sup>Clinical practice handbook for quality abortion care. Geneva: World Health Organization; 2023. <https://iris.who.int/bitstream/handle/10665/369488/9789240075207-eng.pdf?sequence=1>

## Pain management

There are several options for anaesthesia or sedation that should be discussed with the patient as part of her counselling. The method should be based on the woman's wishes and any relevant findings during the clinical assessment

### MEDICAL OPTIONS FOR PAIN MANAGEMENT:



#### *Non-steroidal anti-inflammatory drugs*

All women should be offered nonsteroidal anti-inflammatory drugs 20 minutes before the procedure.



#### *Local anaesthetic injection and Paracervical block*

A local anaesthetic injection to the cervix where the tenaculum is attached and separated to the tissues that surround the cervix to disrupt the pain fibers which supply the cervix and uterus. This does not require sedation or general anesthesia and will not delay discharge, but it does mean that the patient will be awake during the procedure.



#### *Monitored anesthetic care (MAC)*

Monitored anesthetic care (MAC) or deep sedation ('conscious sedation'), or general anesthesia. These are not routinely recommended for vacuum aspiration for women 12-14 weeks gestation, but this depends on the circumstances of the woman and whether she would prefer to be awake during the procedure. She will need to be given nil-by-mouth instructions for the preoperative period and arrange for someone to accompany her to her home. Her recovery time in the clinic will be longer compared to having a local anesthetic. It should be noted that sedation and general anesthesia require specialist equipment and supplies with skilled staff who are competent to administer drugs and monitor the patient during and after the procedure.



### VOCAL LOCAL TECHNIQUES

It is important to understand that pain relief is not just pharmacological.

'Vocal local' or distraction techniques such as controlled breathing and listening can reduce perceptions of pain and of anxiety, and when effective, there is an increased likelihood that the patient will require less pharmacological interventions.

## Manual Vacuum Aspiration

# MVA PROCEDURE

- The procedure room must conform to local standards and should be clean, well ventilated, and adequately equipped.
- A proper bed and fitting suitable for minor gynaecological procedures so that the patient can be put into a dorsolithotomy position are highly desirable so that the patient is comfortable, and the chances of an effective procedure are increased.

## Checking the equipment


---


Before starting the procedure, ensure that all necessary equipment and supplies are ready and laid out before the patient enters the room to reduce the risk of anxiety.

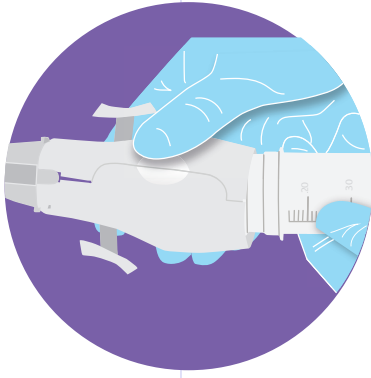
A key part of this is assembling the equipment to check that it is functioning. The essential equipment and supplies list are listed in Table 2.



Table 2: essential supplies and equipment for MVA under 12 weeks.

 INSTRUMENT	QUANTITY PER SET
● Sponge holding forceps	
● Bivalve speculum	
● Tenaculum	
● MVA sets with cannula	
● Gauze	
● Kidney dish for tissue	
● Gallipot for antiseptic solution	
● Sponge forceps	
● Sterile and disposable gloves	
● Needles and syringes	
● Personal protective equipment: aprons goggles	
● Sanitary napkins	
● Waste disposal: (fetal remains)	
● Waste disposal dry waste	
● Sharps disposal	
● Decontamination solution	

 DRUGS	QUANTITY PER SET
● Lidocaine 1% without adrenaline for paracervical block	
● Misoprostol for cervical preparation	
● Oral analgesia, nonsteroidal anti-inflammatory drugs	
● Drugs for sedation as per local protocol (not covered in this training)	
● Emergency drugs box containing e.g., drugs for management of anaphylaxis. See local protocols and requirements	



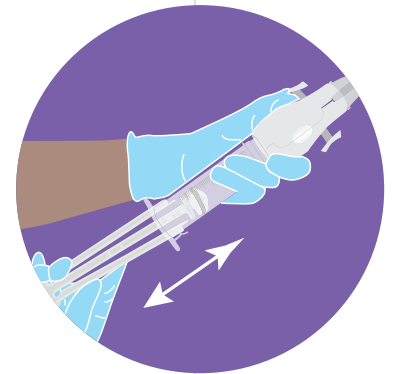
### Step 1

Before the procedure begins, assemble and ready the equipment. Begin with the valve button or buttons open (that are not depressed) with the plunger inserted all the way inside the cylinder and the collar stop locked in place (with the tabs pushed down into the holes in the cylinder).

- Push the button or buttons down and forward until you feel them lock.

### Step 2

- Create a vacuum by pulling the plunger back until the plunger arms snap out and catch on the wide sides of the cylinder base.
- The plunger arms must be fully extended to the sides and secured over the edges of the cylinder. Incorrect positioning of the arms could allow them to slip back inside the cylinder, which raises the risk of injecting the contents of the aspirator back into the uterus. Never grasp the aspirator by the plunger arms.



### Step 3

- Check for vacuum retention by releasing the buttons. This should be done before each use. A rush of air into the aspirator should be heard, indicating that a vacuum was retained.
- If the rush of air is not heard, remove the collar stop, withdraw the plunger and check that the plunger O-ring is free of damage and foreign bodies and that it is properly lubricated and positioned in the groove. Also, make sure the cylinder is firmly placed in the valve. Then create a vacuum and test it again; if the vacuum is still not retained, the aspirator should be discarded and replaced with a new one.



- The Ipas Manual Valve Aspirators are compatible with Semi-rigid and Flexible cannulae sizes 4-10mm and 12mm.
- They should all have lines or dots marked on the length, which are used to assess the size of the uterus during the procedure.



## Preparing the patient



When the patient enters the room, ensure that instruments are covered.



Confirm her identity and check whether a consent form has been signed, review the medical history.



Introduce yourself and any other staff in the room and briefly outline what their roles are.



Ensure that the patient has been helped onto the exam or operating Table and that she is covered with a sheet.



Palpate the abdomen and check for scars, masses, and uterine size.



When the woman is comfortably in lithotomy, assess the size and position of the uterus by bimanual examination. Where available, ultrasound may be helpful for accurate dating where there is a discrepancy between the examination and last menstrual period date. Also, assess whether there is any pelvic tenderness or masses.



Insert a bivalve speculum, check the genital tract and cervix for signs of infection such as abnormal vaginal discharge and pain, and discuss treatment if required. Clean the cervix with antiseptic solution twice from the os to the edge of the cervix.

## Performing a paracervical block



If the patient has chosen a paracervical block as part of her analgesia plan, this should be performed as follows:



Inject 1-2 ml of local anesthetic at the cervical site where the tenaculum will be placed (either at 12 o'clock or 6 o'clock, depending on your preference or the presentation of the cervix).



Stabilize the cervix with the tenaculum at the anesthetized site.



Use slight traction to move the cervix and define the transition of the smooth cervical epithelium to vaginal tissue. This delineates the sites for additional injections.



Slowly inject 2 – 5 ml lidocaine into a depth of 1.5 – 3 cm at 4 points at the cervical/vaginal junction 2 and 10 o'clock and 4 and 8 o'clock.



Move the needle while injecting OR aspirate before injecting to avoid intravascular injection.



The maximum dose of lidocaine in a paracervical block is 4.5mg/kg/dose or generally 200-300mg (approximately 20ml of 1% or 40 ml of 0.5%)

# MVA Procedure



With the speculum still in place and after the paracervical block, apply the tenaculum to the cervix to gently apply traction to straighten the cervical canal.



Introduce a dilator that has a diameter smaller than the estimated gestation of the pregnancy gently through the cervical os into the uterine cavity. Rotating the dilator with gentle pressure can ease insertion.



Repeat this with progressively larger dilators until you reach the cannula size that is appropriate for the patient's gestation.



Once appropriate dilation has been achieved, advance the cannula slowly until it touches the uterine fundus, then withdraw it slightly. **Do not touch the cannulae.**



Use the following Table as a guide to the appropriate size cannulae:

UTERINE SIZE (weeks since LMP*)	SUGGESTED CANNULA SIZE (mm)
4 - 6 weeks	4 - 7 mm
7 - 9 weeks	5 - 10 mm
9 - 12 weeks	8 - 12 mm



It is critical to insert the cannula gently through the cervix. A forceful movement of the cannula increases the risk of trauma to the cervix and the uterus or to the surrounding pelvic organs.



Attach the prepared aspirator to the cannula with care that the cannula does not advance further into the uterus.



Release the buttons on the aspirator to transfer the vacuum through the cannula into the uterus. Blood, tissues, and bubbles should begin to flow through the cannula into the aspirator.



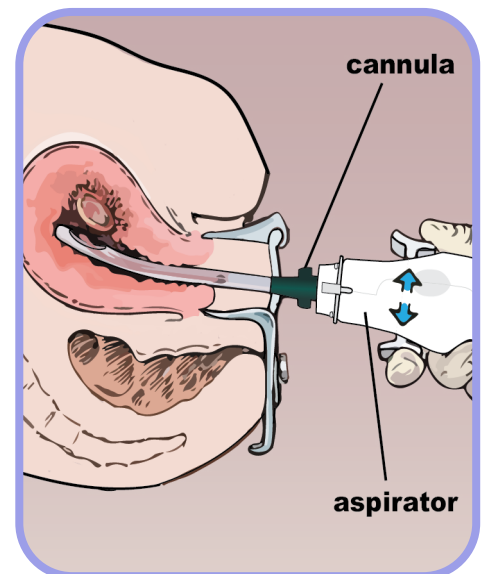
Evacuate the contents of the uterus by rotating the cannula 180 degrees in each direction while using a gentle in and out motion to cover all surfaces of the uterine cavity.



Throughout the procedure, ensure that the patient is comfortable and remain open to offer additional forms of pain relief.

If the patient is moving, there is a risk of the procedure being unsuccessful.

If the patient is not tolerating the procedure despite additional pain control, consideration should be given to abandoning the procedure.



## WHAT TO DO IF THE FOLLOWING HAPPENS:

1

If the aspirator fills up 2/3 and causes the suction to stop or when the syringe is full, depress the valve button or buttons and disconnect the cannula from the aspirator. If there are signs the uterus is not empty, leave the cannula in place in the uterus. Then use either a new aspirator or the current aspirator (after you have emptied the contents), create a new vacuum, and re-attach it to the cannula to remove the remaining contents.

2

If the cannula becomes clogged, ease it back toward but not through the external os of the cervix. This movement will often unclog the cannula. Alternatively, withdraw the cannula and aspirator together with depressing the button or buttons. Remove the tissue with sterile forceps. Re-establish vacuum in the aspirator, reinsert the cannula using the no-touch technique and continue the procedure if required. Never try to unclog the cannula by pushing the plunger back into the cylinder.

3

The signs that the uterus is empty include red or pink foam without tissue that is seen passing through the cannula and a gritty sensation that is felt as the cannula part is over the surface of the evacuated uterus and if the uterus contract around the cannula. When you have established that the uterus is empty, depress the valve button or buttons and remove the cannula from the uterus; If the uterus feels empty and there are minimal products aspirated, consider whether the patient has an ectopic pregnancy and refer as appropriate. Empty the contents of the aspirator into the appropriate container by releasing the buttons, squeezing the plunger arms, and pushing the plunger fully into the cylinder. Follow local protocols for sensitive disposal of fetal remains.

## Instrument processing



It is important to establish what equipment you have in your clinic and read the instructions to understand infection control procedures. Check whether the equipment is sterile on arrival or if any part of it needs processing. All instruments designed for multiple uses must be high-level disinfected or sterilized prior to first use and after each procedure. See document for correct information.

### *MVA for endometrial biopsy*

A 3mm cannula can be used to perform a blind biopsy in the non pregnant patient for a limited number of indications including abnormal bleeding – post coital, post menopausal, intermenstrual. In this context, biopsy should be performed as part of

asuite of wider investigations including hysteroscopy and ultrasound. Simple analgesia in the hour prior to the biopsy may be adequate but consideration should be given to other methods if the patient is anxious or nulliparous.

## Manual Vacuum Aspiration

# POST PROCEDURE

### Patient support and counselling

---

- Immediately post-procedure, reassure the woman that the procedure is finished and help her off the couch or operating table and support her to a recovery area.
- Assess the patient for any further analgesic requirements and ensure these are administered.
- Ensure that there are supplies and equipment available to perform routine observations and manage any complications as for any other surgical procedure.



## PRIOR TO DISCHARGE



Assess the patient to ensure that bleeding has settled and that she is not in pain and that her pulse and blood pressure are normal.



Ensure that the patient has passed urine before she leaves.



Ensure that the patient is safe to leave and that she has the correct follow-up information if she should experience any complications or have any questions.



Patients may not require routine follow-up, but this will depend on your local protocols. Dispense any analgesia which can be taken for a few days after discharge.



Advise her that it is normal to have some vaginal bleeding, and it is usually heavier than a normal period. Bleeding can last for up to a week, but the key point is that it should get lighter over this time.



Discuss post-procedure recommendations such as no douching or placing anything in the vagina until heavy bleeding stops. Post MVA pain can cause some cramping pains like period pain which can come and go for 5-7 days after the procedure



Offer to address any emotional needs the woman might have immediately following her procedure. Ensure that sufficient time is available to discuss these issues with women during the course of her care and arrange an additional appointment if more time is needed.

## FOLLOW UP INSTRUCTIONS



If the pain or bleeding persists or worsens or if she has any fever above 99.5 degrees F/38 degrees C, chills, abnormal or offensive discharge, she should seek medical advice. Clarify when and how to seek help if existing symptoms worsen or new symptoms develop, including a 24-hour contact telephone number.



After early pregnancy loss, offer the woman the option of a follow-up appointment with a health-care professional of her choice. When advising the patient about conceiving again, counsel that she can try for another pregnancy as soon as she feels ready.

## Management of complications

Every facility providing MVA services must be able to stabilize and treat or refer women with hemorrhage immediately with access to intravenous fluid replacement, blood transfusion, intravenous antibiotics, repeat uterine evacuation and genital tract repair.

Complications such as severe bleeding, uterine injury, or infection are rare with first-trimester MVA itself but can occur at the time of procedure or present after the patient has been discharged.

Women may present to your service with post abortion complications from a spontaneous miscarriage that has already occurred or from an unsafe uterine evacuation performed elsewhere. If this is suspected either through the medical history or by assessment of clinical status, ensure that protocols are followed to identify and manage them with all the necessary equipment and supplies that are regularly checked, functioning and accessible. A summary of management options for PAC are reviewed in Table 3.

Table 3: Post abortion care – diagnosis and treatment

Uterine perforation	Haemorrhage due to retained products	Infection
<ul style="list-style-type: none"> <li>● Suspect if cannula advances further than expected or if the vacuum lost</li> <li>● If the patient is awake, she may experience severe pain or increased vaginal bleeding.</li> </ul>	<ul style="list-style-type: none"> <li>● Suspect this if there is ongoing bleeding with abdominal pain.</li> <li>● Diagnosis is made on clinical examination of the abdomen and with speculum examination to assess whether the cervical os is open or with pelvic ultrasound examination.</li> </ul>	<ul style="list-style-type: none"> <li>● Infection can present with fever, chills or abnormal or offensive vaginal discharge.</li> <li>● The patient may also have pelvic pain with bleeding or spotting.</li> </ul>

## Documentation

Robust documentation is critical to high-quality patient care. It should include contemporaneous accounts of patient assessment, investigations, and documentation of results. All decisions and the rationale for interventions should also be accurately documented together with any drugs administered

and procedures carried out. This process not only supports safe and effective care for the patient on the day but contains essential information if she returns with any complications and provides data for quality audit.



## Post-abortion contraception



Ovulation can occur 8-10 days after an abortion so it is important to discuss this during counselling and ascertain if the woman would like to start a particular method immediately.

**The following methods can be started immediately** after surgical abortion including septic abortion with no need for back up methods



Combined oral contraceptives (COC), progestin-only contraceptives (POP) and barrier methods (condoms, spermicide, diaphragm, cap)



Tubal ligation



Additionally, all intrauterine devices (IUDs) may be started immediately or up to 12 days after a first-trimester surgical abortion unless there were signs of infection without a backup method

### If the woman is more than 7 days post MVA:



She can start COCs POP, injectables any time it is reasonably certain she is not pregnant.

- Use backup method for the first 7 days



Copper IUD can be inserted more than 12 days abortion and if no infection is present

- IUDs inserted any time if it is reasonably certain she is not pregnant. No need for a backup method.



LNG-IUDs can be inserted more than 7 days and if no infection is present with a backup method for the first 7 days after insertion.

- LNG-IUDs can be inserted any time if it is reasonably certain she is not pregnant.

Appendix: Competencies for first trimester MVA

Competency	Achieved	Not Achieved	Plans for improvement
<b>ASSESSMENT AND INITIAL MANAGEMENT</b>			
Ability to take a complete medical, obstetric, and gynaecological history including gestational age			
Ability to carry out bimanual pelvic and speculum examinations			
Ability to assess for sexually transmitted diseases and treat as indicated			
Knowledge of all contraindications to medical and surgical abortion			
<b>CLIENT COUNSELLING AND INFORMATION PROVISION</b>			
Comprehensive knowledge of all CAC management options available, including post abortion family planning, and ability to present them in a language the client understands			
<b>INFORMED CONSENT</b>			
Ability to assess client's capacity to understand, retain, and use information provided to make informed decisions			
<b>CERVICAL PREPARATION FOR SURGICAL ABORTION &lt; 12 WEEKS</b>			
Competent cervical preparation using accepted medical or physical preparation methods			
Ability to assess condition/state of cervix (ripeness – soft to allow ease of dilatation with dilators)			
<b>MANUAL VACUUM ASPIRATION</b>			
Ability to administer appropriate analgesia and prophylactic antibiotics			
Ability to monitor and manage clients for pain, bleeding, and vital signs			
Ability to accurately assess uterine depth			
Competent technique for evacuation of uterus using Manual Vacuum Aspiration			
Ability to assess completeness of procedure			
<b>POST PROCEDURE</b>			
Ability to recognise and manage complications and side effects arising from the above			
Ability to administer appropriate FP methods			
<b>CLIENT DISCHARGE</b>			
Ability to make discharge decision based on assessment of pain, bleeding, and vital signs			
Able to give discharge instructions, advice on warning signs and how to contact for follow up			
Ability to prescribe correct medication			

## Contact

---

© WomanCare Global

Email: [contact@dktwomancare.org](mailto:contact@dktwomancare.org)

[www.dktwomancare.org](http://www.dktwomancare.org) | [www.womancare-academy.org](http://www.womancare-academy.org)

