

# Manual Vacuum Aspiration for Treatment of Early Pregnancy Loss Guideline

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## Background

Manual vacuum aspiration (MVA) is a safe, effective therapy for failed intrauterine pregnancy in the first trimester. It can be performed in a variety of clinical settings such as the office, obstetric unit, or emergency department, and offers the advantages of rapidity and reduced cost. The efficacy of MVA is similar to electric vacuum aspiration at 98-99%. General anesthesia can be avoided as only oral analgesia and local anesthesia with a paracervical block are needed.

## Indications and Contraindications for MVA

- Indications
  - Treatment of incomplete or missed abortion when the estimated size of the gestational sac or products is 10 weeks or less.
  - Evacuation of the uterus in a pregnancy of unknown location (PUL) after determination that no chance of a normal or viable intrauterine pregnancy exists
- Absolute Contraindications
  - Patient requests sedation or general anesthesia
  - Known or suspected molar pregnancy
  - Septic abortion
  - Medically unstable patient
  - Medically complicated or uncontrolled medical disorders causing concern for patient safety
  - Known ectopic pregnancy without the possibility for failed heterotopic pregnancy
- Relative Contraindications
  - Patients with increased risk of bleeding such as anticoagulation, platelet abnormalities, factor deficiencies, or other bleeding disorders
  - Abnormalities of the uterus or cervix which could increase the risk of failure of the procedure or increase the risk of complication, such as significant cervical stenosis, congenital anomalies of the uterus, or known intrauterine pathology unrelated to the failed pregnancy

## Counseling

- Document all counseling in the medical record.
- Risks
  - Pain – a paracervical block will be used which does not take away all of the pain from the procedure.
  - General anesthesia or sedation will NOT be used; the patient will feel some pain for a while and then cramping for approximately 6 to 24 hours afterward
  - Infection, bleeding, retained products, uterine perforation
- Benefits
  - Avoidance of general anesthesia, OR cost, convenience
- Alternatives
  - All patients should be offered general anesthesia in the operating room as an alternative to MVA in the office
  - For missed abortion, expectant management or misoprostol may be appropriate
- Contraception
  - An intrauterine device or contraceptive implant may be placed at the time of procedure
  - Combination steroid contraception should be started immediately
  - Depo medroxyprogesterone acetate may be given on the day of procedure

## Pain Control

- Pre-medication
  - Ibuprofen 800 mg PO x 1 given 1-2 hours prior to procedure
  - Hydrocodone 5-10 mg/acetaminophen 325 mg given 1-2 hours prior to the procedure may be used
  - Ativan 1 mg PO x 1 given 1-2 hours prior to procedure may be used for anxiolysis
  - Consider cervical ripening with Misoprostol 200 mcg, 2 tablets per vagina 4 hours prior to procedure, moisten tablets with water prior to placement in patients with a closed cervical os younger than 18 and nulliparous patients after 9 weeks gestation
- Anesthesia
  - Perform **paracervical block** placed at the cervico-vaginal junction at 3, 5, 7 and 9 o'clock, using a total of 20 cc of local anesthetic without epinephrine + 2 cc 8.4% sodium bicarbonate. Give adequate time for the block to work (5-10 minutes)
- Postoperative analgesia
  - Ibuprofen and acetaminophen should be sufficient for post-procedure analgesia, but a small amount of opioid medication may be given
  - Hydrocodone 5 mg/acetaminophen 325 mg, 1 PO q 6 hrs prn severe pain, disp #5 or less

## Antibiotic Prophylaxis

- Give Doxycycline 200 mg po once prior to the procedure these medications are dispensed from the OB/GYN Center or MMOB. No prescription is required.
- If the patient is allergic to doxycycline, then give Metronidazole 500 mg PO BID x 7 days (prescription required).

## Follow-up

- 1 to 2 weeks to monitor postoperative and emotional recovery

## Other Considerations

- Ultrasound guidance may reduce risk of uterine perforation and risk of retained products
- All products of conception should be sent for pathologic examination.
- In the case of uterine atony, uterotonics are available in the OB/GYN Center and MMOB
  - Methergine 0.2 mg IM
- Rh negative patients: If Rhogam not already given, ensure this is ordered and administered prior to patient leaving

## EPIC SmartPhrases

- MVA Patient Counseling: .GTSMVACOUNSEL
- MVA Procedure: .GTSMVAPROCEDURE
- MVA Patient Instructions: .GTSPTINSTRUCTIONS

## References

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