Office Manual Uterine Aspiration for Early Pregnancy Loss Sample Protocol

SUPPORTIVE DATA: Manual uterine aspiration (MUA) in the office is a safe, patient-centered, relatively painless, and cost-effective diagnostic and therapeutic means of evacuating the uterus during first trimester miscarriage or for evaluating the endometrium for abnormal uterine bleeding, infertility, and malignancy.

INDICATIONS:

A) Treatment/completion of incomplete spontaneous abortion in first trimester (<13 weeks)
   1. Ensures POC are fully evacuated
   2. Controls hemorrhage
   3. Evacuates post-partum and post-abortal hematometra

B) Endometrial biopsy

CAUTION/CONTRAINDICATION:

A) Coagulation disorders, anticoagulant drug therapy
B) Uterine anomalies
C) Pelvic inflammatory disease/cervicitis
D) Extreme anxiety
E) Any condition causing patient to be medically unstable
F) Cervical stenosis
G) BMI <50 and <350 lbs.
H) Endometrial biopsy also contraindicated in pregnancy

EQUIPMENT:

- Sterile gloves, mask with face shield, fluid resistant gown
- Vaginal speculum (sterile), light source
- Lubricant
- Antiseptic solution
- Sterile container for antiseptic solution, sterile gauze
- Manual uterine aspirator
- Sterile cannula for aspirator (4-12 mm available, do not open until size determined by provider)
- Cervical dilator (4-12 mm)
- Tenaculum
- Ring forceps
- Sterile syringe, needle extender and needle (or use spinal needle, no needle extender), 1% Lidocaine, anesthetic gel
- Long hemostat
- Sterile basin for emptying aspirator (may use container for antiseptic solution)
- Strainer
- Shallow clear glass/pyrex dish and backlight for examining uterine contents
- Container for pathology
- Monsel's solution/Silver nitrate available

- Misoprostol, methergine, ibuprofen
- Rhogam if indicated

STEPS	KEY POINTS
PREPARATION OF THE PATIENT:	
A) Verify patient name and date of birth	Fever may be a reason to delay procedure, or arrange for procedure in another facility
B) Take vital signs and weight	
C) Have patient empty bladder and obtain urine pregnancy test, if indicated	Pregnancy test only necessary for endometrial biopsy
D) Explain procedure to patient. Patient should have opportunity to read handouts and ask questions	Ideally, patient will have appointment prior to procedure to discuss pregnancy loss and options.
E) Assure patient has a ride home	
F) Offer fluids and snacks	
G) Patient to sign consents prior to medication administration	If patient not pre-sedated and is stable following endometrial biopsy, she should be able to drive self
H) Patient to sign Rhogam refusal if indicated	
I) Administer pre-medication that patient brought to appointment ½-1 hour before procedure	Most patients don't need more than ibuprofen for endometrial biopsy
1. Doxycycline 200 mg or Azithromycin 1 g	
2. Ibuprofen 800 mg	Informed consent should be obtained prior to any pre-procedure sedation
3. Ativan 2-4 mg or Xanax 0.5-1 mg (patient choice whether/how much to take)	Ascertain patient's drug sensitivity and/or history of allergy to skin prep, materials and anesthetics prior to administration of local anesthetic
4. PRN: hydrocodone/acetaminophen 5/325 mg or oxycodone/ acetaminophen 5/325 mg	
J) Advise support person of where to sit and their role during procedure	
K) Prepare patient in procedure room on table with drape	
PROCEDURE:	
A) Perform bimanual exam noting size and position of uterus and/or ultrasound	
B) Inform patient that she may experience cramping during paracervical block, dilation of the cervix and during the procedure	Use size 4 mm dilator and suction cannula for endometrial biopsy
C) Place speculum and perform antiseptic prep and paracervical block	Several paracervical block recipes and techniques exist
D) Dilate cervix to admit suction cannula of the appropriate size, usually equal to estimated gestational age of pregnancy	Use similarly sized dilator/cannula as the pregnancy measures on ultrasound or weeks gestation by LNMP/uterine sizing if no US
E) With gentle traction on the tenaculum, place cannula into cervical os and move cannula	

slowly into uterine cavity until it touches the fundus; then withdraw it slightly	
F) Prepare MUA by generating vacuum before connecting to already placed cannula	
G) Connect MUA syringe to cannula by gently pulling cannula toward you and firmly fixing within nose of MUA	
H) With gentle traction on tenaculum, adjust cannula back to optimal placement in the fundus	
I) Release the buttons on the aspirator to transfer the vacuum through the cannula into the uterus	
J) For uterine evacuation, evacuate the contents of the uterus by rotating the cannula 360 degrees several times until no more tissue is coming into the cannula	If cannula becomes clogged, ease it back toward, but not through the external cervical os. This movement will often unclog the cannula. If it does not, cannula can be removed and tissue removed with sterile forceps or gauze. May re-use if it has not touched any non-sterile surface, otherwise employ a new sterile cannula.
K) Move lower into the body of the uterus and lower uterine segment, turning the cannula slightly with each pass to feel for the gritty texture throughout the uterine cavity	
L) For endometrial biopsy, movement of the cannula gently back and forth along the anterior, posterior and lateral uterine walls should provide sufficient tissue for diagnosis	
M) Empty syringe by detaching it from cannula and emptying into a sterile basin - Repeat earlier steps until all uterine contents removed; can be 2-3 times	Disconnect aspirator from the cannula, leaving the cannula inserted through the cervical os.
N) For endometrial biopsy, collect aspirated material in formalin and send specimen to pathology	
O) For uterine evacuation, inspect aspirated tissue, if not conclusive, consider re-aspiration or ultrasound, if available in the clinic	Signs that the uterus is empty include red or pink foam without tissue passing through cannula, gritty sensation felt as cannula passes over the surface of the evacuated uterus, uterus contracts around or "grips" the cannula, and/or patient notes pain as uterus contracts.
P) Send products of conception to pathology in a specimen cup – doesn't require any medium	
Q) Order methergine/misoprostol as needed	
R) Order Rhogam if indicated	
POST PROCEDURE CARE:	
A) Ask the patient to remain supine for a few moments following the procedure; place chux	
B) May elevate head of table after a few	

minutes; assess for vasovagal reaction C) When patient feels ready, may dress and prepare for recovery D) In recovery stage, offer fluids and snack, heating pad for abdomen E) Assess vital signs, BP every 15 minutes. Assess amount of bleeding at same intervals. F) Review discharge instructions, contraceptive education, warning signs, and when to call G) Administer Rhogam/depo if indicated H) Assess for painful uterine cramping I) Ask patient to go to restroom - if heavy bleeding is not observed and the patient is stable, may be discharged after 30 minutes J) Patient to have follow up appointment in 1 week scheduled	For endometrial biopsy, inform patient that she will be contacted by phone or mail with results. For endometrial biopsy, sexual relations may be resumed earlier, in 3 days unless bleeding is heavier.
DOCUMENTATION: A) Document procedure and patient's tolerance B) For uterine evacuation, document visual inspection of aspirated uterine contents C) Document vital signs and patients pain level before, during and after procedure D) Document that patient received discharge instructions and verbalized understanding, and plan for follow up care	
PATIENT EDUCATION: A) Take medication as directed, ibuprofen every 6-8 hours and narcotic as needed B) Pads should be used for 1 week C) Patient should report the following: a. Fever with temperature higher than 100.4°F or 38°C 24 hours post procedure b. Severe cramping not relieved by medication, especially more than 24 hours post procedure c. Bleeding and soaking through more than a pad an hour d. Dizziness or syncope e. Nausea, vomiting or diarrhea for more than 24 hours post procedure f. Overwhelming sadness or depression D) Give written aftercare instructions including how to get help after hours	

References

A) University of Washington Family Medicine Network, MM-TI training site 2010
B) IPAS Gynecological Aspiration System Instruction Manual