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# 3RD Annual Comprehensive Workshop
on
# Minimally Invasive Gynecology
for
# Residents and Fellows

*December 3rd – 4th, 2014*
*Toronto, Ontario*

# Diagnostic Hysteroscopy

1. List common indications for diagnostic hysteroscopy;
2. Recognize basic equipment and instrumentation required for hysteroscopy set-up;
3. To discuss the role of pre-medication and local anesthesia in diagnostic and basic operative hysteroscopy;
4. Feel comfortable to start a diagnostic hysterosocpy program at your hospital.

# Diagnostic Hysteroscopy

- In the past, dilatation and currettage was a mainstay procedure in gynecology for evaluation of the uterine cavity, e.g.,
  - retained POC following miscarriage or delivery
  - sampling endometrium/removal of polyps in cases of AUB
- D&C is a blind procedure; the ability to visualize the uterine cavity in real time in invaluable.
- D&C combined with imaging *MAY* be useful:
  - TV U/S
  - 3D U/S
  - SIS
  - MRI

  ***but imaging is usually done by others***

# Common Indications for Dx Hyst

- Abnormal uterine bleeding is main…
  - Change in the pattern/character, duration, flow, dysmenorrhea
  - Looking for polyps/submucous fibroids
  - Take a sample to R/O hyperplasia or cancer
  - Amenorrhea to evaluate 1st compartment
- Postmenopausal bleeding
  - The use of TV U/S (in my opinion) is as a final option when “simple” sampling has failed
  - U/S endometrial thickness does not achieve the “gold standard” – tissue for histopathologic evaluation
- Asymptomatic endometrial thickness on imaging
  - Increasingly common finding; endometrium >13mm worthy of further evaluation
- Plays a role in evaluation of pelvic pain
  - Polyps, fibroids, synechiae, cervical stenosis

# Equipment & Set-up

- A room dedicated to proper positioning of patient and equipment:
  - Need a desk for computer and write-up either in or immediately adjacent to procedure room;
  - Good quality scopes, good supply (#’s), proper tower - camera/monitor/digital capture
  - Team acceptance that Dx hysteroscopy is normal; pt-safety culture
  - Need to consider the following:
    - Pt preparation
    - Safe completion of procedure
    - Ergonomics
    - Efficiency for the patient
    - Efficiency for the surgeon

# Equipment & Set-up

- Pt-preparation; “pre-op”
  - This starts before you even meet the pt, when the referral is sent – educate your referring providers
    - Check CBC, TSH, coags
    - Insure cervical cytology is up to date
    - Examine the pt
    - Discuss and try conservative measures such as NSAID, OCP, Cyklokapron, Mirena
  - Send the pt written info, or better yet, online media for information
  - Consider pre-meds and/or paracervical block
  - Where to meet the pt for discussion and pre-procedure preparation (i.e., where do you take your history and counsel the pt on what to expect)

# Equipment & Set-up

- Pt-preparation; “intra-op”
  - I use pre-meds, speculum and para-cx block…others may use no pre-meds and straight vaginoscopy → hysteroscopy
  - Pre-meds:
    - Misoprostol 400mcg taken night before procedure
    - NSAID and acetominophen ~30-60 minutes prior to procedure
    - Lorazepam 1mg S/L prn just before procedure
  - Paracervical block
    - Topical bupivicaine spray, then wait 30 seconds
    - 10cc syringe with 22 gauge spinal needle
    - 1% xylocaine w/o epinephrine:
      - 1-2cc at 12, 3, 9, 5 and 7 o’clock position
  - Flexible os-finder


# Equipment & Set-up

- Safe completion of procedure
  - Need a bed or table with stirrups or ability to comfortably support pt in dorsal lithotomy or at least semi-recumbant position for a “speculum type examination” that will realistically last 5-10 minutes
  - Scope/sheath that is small enough to minimize discomfort, but rigid and durable enough for prolonged life of multiple uses
  - When the patient is awake and without sedation, informed consent is really an ongoing process…there is a very minor risk of bleeding/infection; the risk of perforation is also low, but would be obvious with increasing pain during procedure

# Equipment & Set-up

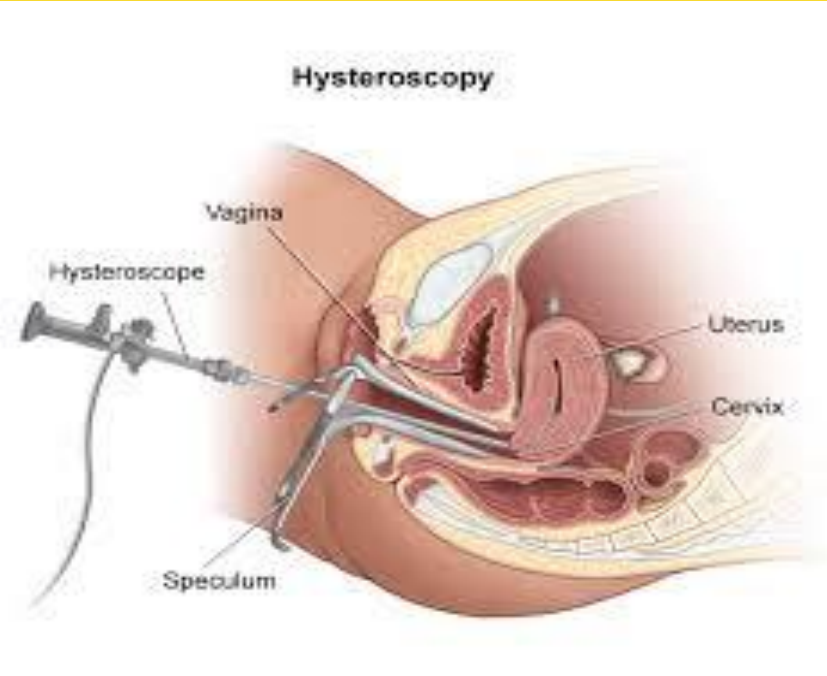
- Ergonomics
  - Ideally you can access paper or electronic records very near your procedure space; dictation (if necessary) occurs very nearby
  - Bed should allow comfortable positioning for the pt – will take 5-10 minutes (at least) and adjustment of table height for surgeon
  - Sitting stool for surgeon should swivel and allow vertical adjustment
  - Need an assistant skilled in procedure basics (i.e., name of equipment, an ability to retrieve additional items, hold as necessary, assemble scope)

# Equipment & Set-up

- Efficiency for the pt
  - We send information to providers instructing the proper initial W/U
  - We send written info to the pt so she knows what to expect
  - We do consultation, procedure and counselling at same visit; plan to reconvene in the office ~6 weeks later
  - In straight forward cases, we allow patients to cancel office F/U appt and book directly for Mirena insertion, Novasure or TCRE (polyp/fibroid) procedures
- Efficiency for surgeon
  - Get a very complete evaluation of the pt and her presenting problem
  - Avoid multiple visits to office, procedure room, OR

# Equipment & Set-up

- Tips and tricks
  - Warn the pt that she will feel a strong menstrual-like cramp…this is due to distension media and will only last 20-30 seconds because that is all the time you will need to visualize the cavity → you “take 2-3 deep breaths and I will be done”
  - Take out the speculum before inserting scope; will really help with the anteverted uterus
  - Take advantage of the angle on your lens to see the ostia and fully evaluate cavity



# Equipment & Set-up

- Tips and tricks
  - Use a flexible os finder – they come with a short- and a long-taper; start with the long taper, then go to the short taper if you sense some cervical stenosis

  - If the os is stenotic (e.g., postmenopaual), after you place paracx block, use an 11 blade to make a very small incision in the adhesion, then dilate with os finder

# Starting a Program

- If your status quo has been hysteroscopy only completed in the operating theatre, with major anesthesia, start by asking the anesthetist to lighten up the meds; consider just using IV sedation…tell him/her it will get the pt out of RR and SDC faster

- Identify a procedure space and procure the equipment
  - Can usually find an older tower (light source monitor) if funding is an issue
  - Good quality scopes run ~$5,000-7,000…most hospitals can purchase these on an ongoing basis thru operational budget…consider capital equipment request for start-up funds
  - Hospital foundation loves to purchase equipment for women and children

# Starting a Program

- Inform your referring providers with memos and educational materials;
- Prepare your booking staff with answers to the FAQs;
- Start slow with a few cases;
- Prepare the support staff who will be in your room:
  - there is a psychological component with local anesthesia cases…if you or your nurses are nervous, the pt will sense it and her anxiety in turn will cause her to be more aware of any stimuli and therefore she will perceive more pain with the procedure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