Level 1- (Declarative knowledge)

1. The learner should be able to list the benefits of a vaginal hysterectomy:
   - Lower morbidity
   - Less pain
   - Rapid recovery
   - Faster return to normal activities
   - Lower consumption of health care dollars and resources.

2. The learner should be able to list indications/qualifications for vaginal hysterectomy:
   - No evidence of malignancy
   - Size less than 12wk size, if greater- whether or not size reduction possible
   - Pathology confined to uterus
   - No evidence of severe endometriosis or adhesive disease
   - Cul-de-sac has to be accessible
   - *Relative Contraindications: enlarged uterus, prior pelvic surgery, malignancy, extra-uterine disease such as endometriosis, PID*

3. The learner should be able to document Exam Under Anesthesia:
   - Confirm no pathology
   - Document degree of descensus with tenaculum on cervix
   - Abnormalities such as cystocele and rectocele
   - *Most common location of enterocele: posterior superior vaginal segment*

4. The learner should be able to identify anatomic landmarks:
   - Border of vaginal rugae
   - Uterosacral ligament, Cardinal ligaments, Uterine vessels
   - Location of ureter near cervix: in cardinal ligament
   - Uterine arty= level of anterior broad ligament

5. Basic knowledge:
   - Cystotomy: Incidence: 1.2%
   - Location of cystotomy: usually well above trigon, not near ureteral orifices
ACOG Simulations Consortium- Vaginal Hysterectomy Learning Objectives

- Rectocele incidence after vaginal hysterectomy 0.1%-16%
- Uterosacral as primary suspension in vaginal vault
- Most common site for bleeding: between utero-ovarian and uterine artery pedicles, second common is posterior vaginal mucosa

Level 2: Simulated and Clinical performance:

6. Preparation:
   a. Time out
   b. SCDs/DVT prophylaxis
   c. Single dose antibiotics prophylaxis
   d. Position
      - Stirrups supporting the entire leg are preferable
      - Angles: 90 degrees between thigh and torso, and at the knee
   e. Exam under anesthesia
   f. Betadine/Ethanol scrub
   g. Drape: Self adherent Surgical Drape

7. Procedure:
   a. Decompress bladder- indwelling catheter optional, consider leaving some urine in bladder to help identify cystotomy
   b. Inject vasoconstricting agent properly and in appropriate plane
   c. Initial incision at point of minimal blood loss, point of decreased vaginal rugae
      *Incision may be made with energy*
   d. Bladder must be dissected, deflected and protected
   e. Enter peritoneum anteriorly and posteriorly
      *Anterior entry into the peritoneal cavity is not a must for the uterosacral and cardinal ligament ligations.*
      *Posterior entry should be with sharp dissection*
   f. Identify uterosacral and cardinal ligaments, and uterine vessels
      *Tag uterosacrals for use in McCalls*
   g. Clamp placement and Hemostasis: open clamps widely and slide off cervix or lower uterine corpus before clamping down in an effort to include all vascular collaterals.
      *Before any attempt of delivery of uterus or morcellation, abdomen must be entered both anteriorly and posteriorly. Subsequent to peritoneal entry, all clamp placements must include anterior and posterior edges of the peritoneum to ensure closure of all collaterals with vasculature.*
   h. Remove uterus ONLY once all ligaments and vessels are ligated and secured
ACOG Simulations Consortium- Vaginal Hysterectomy Learning Objectives

- Uterus descends after uterine artery dissection is complete
- If uterus is small: deliver fundus through anterior or posterior colpotomy
- If uterus is large: Consider bivalve, Intra-myometrial coring, Morcellation
  i. The upper pedicles, which include the cornual end of the Fallopian tubes, and round and ovarian ligaments are usually clamped at once. In anticipation of too large pedicles, round ligaments can be clamped and ligated separately. *This may also be appropriate to facilitate adnexal removal.*
  j. Secure the upper pedicles with a double ligation technique.
  k. Evaluate pedicles in clockwise fashion- using sponge on ring forceps
  l. Remove ovaries if part of plan
  m. Closure of Cuff- Consider McCall’s Culdoplasty
     - Incorporate uterosacral ligaments into cuff to reestablish suspensory aspect of vagina (so that enterocele or vaginal vault prolapse does not form)
     - Incorporate full thickness of cuff including peritoneal edge on posterior side
     - Closing the peritoneum is not necessary
  n. Packing is not necessary unless Anterior/Posterior repair is formed
  o. Indwelling catheter is not necessary unless another procedure was done
  p. Oral intake may start as tolerated

References:


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