LAPAROSCOPIC SALPINGECTOMY

Level 1 (Declarative Knowledge)

1. The learner should be able to define, in a verbal or written mode without references, ectopic pregnancy including the order of incidence based upon location
   - Ectopic pregnancy – a pregnancy that develops following implantation anywhere other than the endometrial cavity of the uterus.
     - Ampulla portion of tube 55%
     - Isthmic portion of tube 20-25%
     - Infundibulum and fimbria portion of the tube 17%
     - Interstitial segment (cornua) 2-4%
     - Ovary 0.5%
     - Cervix 0.1%
     - Abdomen 0.03%

2. The learner should be able to list in a verbal or written mode major contributing risk factors for ectopic pregnancy
   - Assisted reproduction
   - Current use of IUD
   - Prior tubal surgery
   - Pelvic inflammatory disease
   - Infertility
   - Adhesions
   - Anatomic abnormalities

3. The learner should be able to list in a verbal or written mode common signs and symptoms of ectopic pregnancy
   - Nausea, breast fullness, fatigue, amenorrhea
   - Lower abdominal pain, heaving cramping, shoulder pain
   - Vaginal bleeding or spotting
   - Pelvic tenderness, and enlarged, soft uterus
   - Adnexal mass, tenderness
   - Positive pregnancy test
   - Less than 50% increase in hCG titer in 48 hours
   - Serum progesterone < 25 ng/ml
   - Absence of gestational sac in the uterus by ultrasound when hCG titer exceeds discriminatory level (1500-2500 mIU/ml)
   - Gestational sac or suspicious mass outside the uterus by U/S
4. The learner should be familiar with the qualifications for, as well as relative and absolute contraindications for laparoscopic management of ectopic pregnancy

**Qualifications:**

- Hemodynamically stable patient
- Patient able to tolerate adequate Trendelenburg position
- Proper equipment available
- Adequate surgical skills possessed by the surgeon

5. The learner should describe or identify in a verbal or written mode major anatomic landmarks of the pelvis and specific anatomy of the fallopian tube

- Ostia/fimbria
- Ampulla
- Isthmus
- Interstitial/intramural
- Mesosalpinx
- Blood supply (arcuate formed by branch of the ovarian and tubal branch of the uterine arteries)

6. The learner should be able to in a verbal, written, or demonstration mode identify, assemble, and use all of the equipment necessary for LSC linear salpingectomy

- Laparoscopic trocars
- Veress needle (optional)
- Laparoscope
- Laparoscopic camera head
- Light cord
- CO2 tubing
- Laparoscopic tower equipment
- Monopolar or bipolar LSC scissors, Harmonic scalpel or hook
- Suction irrigator
- Laparoscopic grasper
7. The learner must in a verbal, written, or demonstrative mode identify the number, size, and locations of incisions for port placement to facilitate performing LSC salpingectomy

- intraumbilical (5 or 10 mm)
- minimum of two accessory ports (5 or 10 mm) placed properly in the lower lateral quadrants, suprapubic position and/or lateral upper abdominal position

**Level 2 (Simulated and Clinical Performance)**

(Specific Task: LSC linear salpingectomy of ampullary ectopic)

8. Prepare and position the patient for laparoscopy

9. Describe or place uterine manipulator/sponge stick

10. Able to assemble camera, suction tubing and energy sources/instruments

11. Describe or perform gaining initial access to abdominal cavity and create appropriate pneumoperitoneum

   a. Veress needle
   b. Direct trocar insertion (blind or visual)
   c. Open (Hasson)

12. Visually inspect the pelvis and upper abdomen to survey anatomy

13. Demonstrate proficiency maneuvering laparoscope

14. Describe or demonstrate secondary trocar placement to avoid complications and maintain sufficient spacing for full range of motion, including proper trocar diameters

15. Evacuate obscuring blood via suction irrigator

16. Identify the ectopic pregnancy site

17. Evaluate the opposite tube

18. Grasp, position, and orient the fallopian tube
19. Inject vasoconstricting agent properly (optional)

20. Perform adequate salpingectomy of fallopian tube with ectopic pregnancy
   a. Monopolar scissors
   b. Bipolar shears
   c. Harmonic scalpel or hook

21. Secure hemostasis without excess tissue damage

22. Retrieve the entire specimen either through largest adequate trocar or place in specimen retrieval pouch

23. Confirm hemostasis by lowering intraabdominal pressure

24. Irrigate and remove blood and fluid by suction

25. Close appropriate fascial defects after trocar removal

26. Properly remove all remaining trocars

27. Properly close skin incisions

References: