

Name \_\_\_\_\_

Date \_\_\_\_\_

## **St. David's Medical Staff**

### **Laser Safety in the Perioperative Setting Post -Test**

1. The word laser is an acronym which stands for
  1. Light and Spectrum of Energy Radiation
  2. Laser and Surgical Energy Research
  3. Light Amplified by Stimulated Emission of Radiation
  4. Laser Amplified by Special Emission of Radiation
  
2. There are 2 basic types of laser. The CO<sub>2</sub> laser is an example of a
  1. Contact laser
  2. Non-Contact laser
  3. Visible Laser
  4. Multi-wave length Laser
  
3. Laser lights unique properties that provide its power are
  1. Coherent, Collimated, & Monochromatic
  2. Collimated, Coagulation & Evaporization
  3. Monochromatic, Coherent & Ionization
  4. Collimated, Evaporation & Ionization
  
4. The Helium Neon beam coincides with the CO<sub>2</sub> beam to:
  1. Provide additional power
  2. Create Ultrapulse energy
  3. Provide visibility of the beam
  4. Introduce coagulation energy
  
5. A GYN Surgeon is going to laser vulvar & anal condolomata using the CO<sub>2</sub> laser. The surgeon should identify that all of the following interventions are accomplished for patient and staff safety **except**:
  1. Make sure windows in the OR are covered.
  2. Place a wet raytec In the rectum
  3. Activate a smoke evacuator while lasering tissue
  4. Advise the laser assistant to place the laser in standby when not in use.
  
6. The CO<sub>2</sub> laser has minimal thermal spread. What is the depth of tissue penetration?
  1. 0.1-0.2mm
  2. 0.5- 0.6mm
  3. 1mm-2mm
  4. 0.1-0.6mm

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7. The surgical team is performing a laparoscopy and laser vaporization of endometriosis implants. The patient's Hemoglobin & Hematocrit are 10.2 & 30.0. The primary reason that a plume filter is required is:

1. It is difficult to see with the smoke from the laser plume.
2. The carbon monoxide in the laser smoke combines with hemoglobin, decreasing the amount of available hemoglobin to combine with oxygen.
3. The laser smoke & insufflations CO<sub>2</sub> can cause an air embolism.
4. It exposes laser plume to the surgical team.

8. The Nominal Hazard Zone (NHZ) requires all personnel to don laser eye protection, including the patient. At St. David's Medical Center the NHZ is:

1. Limited to 3 feet around the Sterile Field.
2. The entire Operating Room.
3. Only where non-contact lasers are used.
4. The OR in which the laser is being used.

9. Medical Staff Credentialing for the CO<sub>2</sub> includes all of the following except:

1. Initial Certificate or Residency Program for initial certification in CO<sub>2</sub> lasers
2. 2 CO<sub>2</sub> Laser Cases per year or Documentation of CO<sub>2</sub> Laser Safety Training for reappointment
3. 1 Proctored CO<sub>2</sub> laser Procedure by an appropriately privileged Medical Staff member for re-appointment after lapse in privileges
4. Watching 2 CO<sub>2</sub> laser procedure videos

10. For each Laser procedure performed at St. David's Medical Center the Nursing Staff completes

1. Meditech laser documentation
2. Laser Log
3. Laser Safety Checklist
4. All of the above