SUBJECT: V-117 ELECTROSURGERY USAGE & SAFETY	<b>POLICY #</b> : 1242 <b>VERSION:</b> 1
APPROVED BY:	
ASC Approvers	
DATE APPROVED: 06/28/2016	

- **PURPOSE:** To provide guidelines for safe use and proper functioning of the electrosurgical equipment, in order to protect patients and personnel from hazards associated with it.
- **POLICY:** The Ambulatory Surgery Center Nursing staff must follow procedure below to ensure safety when using electrosurgical equipment.

#### **PROCEDURE:**

#### I. PREOPERATIVE PREPARATIONS

- A. Equipment
  - 1. Facilities must have inspected all electrosurgical units prior to use in the operating room (OR).
  - 2. An inspection sticker, indicating date of inspection, must be attached to the electrosurgical unit (ESU).
  - 3. Inspection of the ESU must be performed at least annually.
  - 4. Only an ESU with current inspection sticker may be used.
- B. Personnel who handle or operate electrosurgical equipment will demonstrate competency in the use of the unit and must be familiar with the safety precautions.
- C. Only properly functioning electrosurgical equipment is used.
- D. Prior to the surgical procedure, the ESU is checked as follows:
  - 1. Presence of current inspection sticker from Biomedical Engineering.
  - 2. All cords are inspected for integrity.
  - 3. The alarm systems are checked. Alarms are to audible and visual at all times.
  - 4. Power settings are set as low as possible. The Nurse Circulator will confirm the power setting before activation of the ESU.

	<b>POLICY #</b> : 1242
V-117 ELECTROSURGERY USAGE & SAFETY	VERSION: 1

- 5. When used, the ESU footswitch is placed in a clear impervious cover to protect footswitch from fluid spillage during particular surgical procedures.
- E. All metallic patient jewelry should be removed prior to transfer to the OR suite.
- II. INTRAOPERATIVE SAFETY
  - A. Safety precautions must be taken when a dispersive electrode is applied.
    - 1. Only dispersive electrodes that have not exceeded the expiration date are used.
    - 2. Dispersive electrode must be appropriate size for patient age and weight.
    - 3. Dispersive electrode must be placed securely on patient after patient is positioned.
    - 4. Dispersive electrode must be placed over area of good blood supply, avoiding:
      - a. Bony prominences
      - b. Scarred/fatty areas
      - c. Metallic implants
      - d. Tattoos, if possible
    - 5. Hair may be removed, if no alternative site is available.
  - B. Safety precautions are taken during the procedure.
    - 1. Dispersive electrode contact is checked when patient is repositioned.
    - 2. Cord connections and dispersive electrode contact are checked when higher than normal settings are requested.
    - 3. When not in use, active electrodes are maintained on the field in a clean, dry, nonconductive safety holster.
    - 4. During surgical procedures involving the patients' face or head, the electrosurgical hand piece will remain off the operative field until a discussion/communication between the surgeon and anesthesia has taken place regarding any oxygen that may be in use or needed to be used, to verify it is safe to use electrocautery.

SUBJECT:	<b>POLICY #</b> : 1242
V-117 ELECTROSURGERY USAGE & SAFETY	
	VERSION: 1

- 5. During surgical procedures involving the patient's face or head, if possible, the technique of draping should be wide to expose the whole head in order to allow supplemental oxygen, as administered by face or nasal prong, to disperse. If possible, during monitored anesthesia care, local anesthesia with epinephrine should be used to minimize the need for electrocautery.
- 6. The electrode tip must be:
  - a. Visually inspected, before use and replaced if damaged.
  - b. Cleaned away from the incision site, with either a moistened sponge or an abrasive electrode cleaning pad, and never cleaned with a scalpel blade.
- 7. Active electrode blades are not to be activated in the presense of flammable agents.
- 8. Open suture packets containing alcohol will be removed from the sterile field as soon as possible.
- 9. Sponges used near the active electrode tip should be moist to prevent unintentional ignition.
- 10. Electrosurgery should not be used in an oxygen enriched environment.
- 11. Nonflammable material is to be available on the sterile field to extinguish any fire.

#### III. POSTOPERATIVE SAFETY

- A. Patient Safety
  - 1. Following surgery, the dispersive electrode is removed gently from the skin.
  - 2. The skin under the dispersive electrode is inspected of integrity.
- B. Equipment
  - 1. All disposable active electrode tips are secured in impervious container.
  - 2. Power cords are unplugged and secured.
  - 3. Any malfunctioning equipment is to be removed and reported to appropriate personnel.

SUBJECT:	<b>POLICY #</b> : 1242
V-117 ELECTROSURGERY USAGE & SAFETY	
	VERSION: 1

#### IV. DOCUMENTATION

A. The following information is documented in the patient's medical record:

- 1. Manufacturer model and serial number of electrosurgical unit.
- 2. Identification and lot number of dispersive and active electrodes.
- 3. Site of dispersive electrode placement.
- 4. Shave of dispersive electrode placement site when applicable.
- 5. Identification of person performing shave.
- 6. Condition of skin following shave.
- 7. Condition of skin prior to dispersive electrode placement and following removal.

### **REFERENCES:**

The Manual of Operating Room Management

AORN Standards and Recommended Practices 2016

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