



DEPARTMENT OF THE NAVY

BUREAU OF MEDICINE AND SURGERY

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IN REPLY REFER TO

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MEMORANDUM FOR COMMANDER, U.S. FLEET FORCES COMMAND
COMMANDER, NAVY MEDICINE EAST
COMMANDER, NAVY MEDICINE WEST
COMMANDER, NAVY MEDICINE NATIONAL CAPITAL AREA
COMMANDER, NAVY MEDICINE SUPPORT COMMAND

Subj: INSULATION TESTING OF REUSABLE LAPAROSCOPIC ELECTROSURGICAL
INSTRUMENTS (LEI) AND USE OF DISPOSABLE ELECTROSURGICAL HOOKS AND
SPATULAS

Encl: (1) Association of Operating Room Nurses (AORN) 2010 Perioperative Standards and
Recommended Practices, Page 435, Recommendation XV

1. The Bureau of Medicine and Surgery is adopting the AORN 2010 Perioperative Recommended Practice XV (insulation testing of reusable LEIs), enclosure (1), at all Navy locations using reusable insulated LEIs. In addition, all Navy sites will convert to using disposable electro-surgical hooks and spatulas within 30 days of the date of this policy except as noted in paragraph 4.
2. The insulation provided for LEIs has a history of failing due to small punctures, wear, and slices which are difficult to see or not apparent even with magnification. Testing of reusable instruments between each case (after decontamination, prior to final sterilization) is essential to minimize the possibility of unexpected electro-surgical tissue damage. The use of disposable electro-surgical hooks and spatulas will also minimize additional risks.
3. Naval Medical Logistics Command is authorized to do a centralized purchase of the testers for every surgical location performing minimally invasive procedures. Prioritization of distribution will be based upon Specialty Leader recommendations.
4. Navy medical locations are expected to implement all aspects of the AORN Recommended Practice XV, train staff on the use of the devices, and utilize disposal equipment where needed. This policy is effective immediately for all inside the Continental United States (CONUS) medical treatment facilities (MTFs) with testers. CONUS MTFs without testers will utilize disposable equipment. Outside the Continental United States (OCONUS) and Operational sites will implement the testing policy upon receipt of the testers and/or disposable equipment and will convert to disposable electro-surgical hooks and spatulas upon receipt of the items. Sites will provide weekly status reports to the Regions on their progress in implementing this policy.
5. My point of contact is Carmen Birk at (202) 762-3081 or Carmen.Birk@med.navy.mil.

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XIV.n. After cleaning and disinfection, instruments contacting viscoelastic material should be inspected for residue under magnification.

Viscoelastic material is difficult to remove during cleaning, and inspection with magnification can enhance detection of residual material.

XIV.o. Records should be maintained of all cleaning methods, detergent solutions used, and lot numbers of cleaning solutions.

These records can be used to facilitate investigation of any suspected or confirmed cases of TASS.

XIV.p. An adequate inventory of instruments should be provided to allow for thorough instrument cleaning and sterilization.

An adequate inventory of instruments facilitates compliance with proper decontamination and sterilization processes.

XIV.q. Adequate time should be provided for thorough instrument cleaning and sterilization.

Time constraints may create a disincentive for personnel to adhere to decontamination procedures and may result in non-compliance.

Recommendation XV

Insulated electrosurgery instruments should be decontaminated after use according to manufacturers' validated, written instructions and inspected for damage. (PNDS: 170, 198, 1122)

Breaks in the insulation of electrosurgery instruments can occur during use and handling. These insulation failures can result in current leakage and subsequent burns. Inspection of the instruments provides a screening mechanism to identify visible insulation breaks.³⁴ Additional information about electrosurgery can be found in AORN's "Recommended practices for electrosurgery."⁹

XV.a. Insulated electrosurgical instruments should be inspected for small breaks in the insulation before initial use. (PNDS: 172)

Breaks in insulation can occur during manufacturing and transportation.

XV.b. Insulated instruments should be handled in a manner to prevent sharp instruments from

contacting the insulation, and they should be segregated from sharp objects during use, transport, and decontamination.

Sharp objects and rough handling can damage the insulation during use, transport, and decontamination.

XV.c. Electrosurgical instruments should be decontaminated according to manufacturers' written instructions using care to avoid damaging the insulation on the device. (PNDS: 172, 1122) Abrasive cleaning may damage insulation.

XV.d. The insulation on electrosurgical instruments should be inspected for impairment using a magnifying lens after decontamination. (PNDS: 172)

Visual inspection identifies obvious breaks in insulation, but will not identify all insulation failures. Using a magnifying lens can assist with identifying small imperfections.³⁴

XV.e. Technology should be used to conduct stray current leakage tests at the end of each decontamination cycle.

Current can leak through insulation, even when breaks are not clearly visible. Performing a visual inspection and performing any recommended technological evaluation before preparation for sterilization minimizes the risk of using defective instruments that could lead to patient injury. Detecting insulation failures well in advance of a surgical procedure provides time for equipment replacement.

XV.f. Equipment found to have insulation damage should be immediately removed from service and repaired or replaced.

Instruments with impaired insulation are unsafe for use.

XV.g. Manufacturers' written recommendations limiting the use of insulated instruments to a specific time frame or number of reprocessings should be followed. (PNDS: 1122)

Manufacturers validate the life span of the equipment insulation, and use after that period of time can result in injury to the patient. If injury occurs in this situation, the health care organization may have to assume the liability.