02.01 – Infection Control Guidelines for the Department of Anesthesiology

Purpose

To outline guidelines for safe practices in the Department of Anesthesiology

Audience

All employees of UTMB hospitals and clinics, contract workers, volunteers, and students in the Department of Anesthesiology/Operating Room Support Services

Policy

- Hand hygiene shall be performed before and after each patient contact (*see policy: 01.14 Hand Hygiene for All Hospital Employees*).
- Personnel shall comply with Employee Health Center guidelines for their area.
- Eating and drinking shall be confined to designated areas.
- All personnel shall adhere to the hospital dress code and to the dress code of their department. Clean attire shall be worn at all times.
- All personnel shall follow the instructions as posted on the door of a patient in isolation. All guidelines shall be followed. Items which shall be removed from the patient's room shall not be placed on surfaces in that room (*see policy: 01.19 Isolation Precautions*).
- Suspected or known exposure to or acquisition of a communicable disease shall be reported to the Department of Infection Control and Healthcare Epidemiology (ICHE) or the Employee Health Center immediately.
- Cuts and lacerations shall be covered with a waterproof dressing.
- Standard Precautions shall be followed for any and all contact with blood and body fluids.

Equipment and Supplies

- Disposable devices shall be discarded after one use unless approved for inclusion in the UTMB program for reprocessing of single use devices (*see policy: 1.07 Disposable Patient Care Items*). Devices designated as single-patient use may be reused on the same patient if clean and operating correctly.
- Clean equipment shall be covered with plastic for storage, tagged clean or placed in a designated area.
- Anesthesia carts shall be cleaned and disinfected after every case. Emergency equipment such as resuscitation bags and laryngoscope

blades shall not be left on anesthesia carts unless protected by appropriate dust covers.

- Soda lime canisters do not need to be routinely changed. The canister shall be replaced when greater than 5mm/Hg per manufacturer recommendations. Anesthesia personnel with cutaneous infections of the hands or forearms or facial infections not covered by occlusive dressings shall not enter the operating room or handle equipment.
  - Personnel with such symptoms shall report their illness to their supervisor.
  - The employee will be sent to the Employee Health Center for evaluation to determine whether the employee must be sent home or can return to work.
- Separate clean and dirty work areas shall be defined and maintained.
- Storage: *see IHOP 08.01.21*.
- Follow standard precautions to avoid contamination of skin, mucous membranes, and clothing with blood and body fluids. Gloves shall be worn when cleaning items contaminated with patients' blood, other body fluids or excretions. Hand hygiene shall always be performed after removal of gloves.
- All refrigerators shall contain thermometers and temperatures recorded daily (*see policy: 01.04 Care of Refrigerators and Freezers*).
- All equipment contaminated with blood or other body fluids shall be decontaminated by appropriate means prior to being serviced (i.e., in the decontamination room).
- When equipment is damaged, the equipment must be cleaned prior to placing it out of service.
- The following equipment shall be sterile: vascular needles, catheters and tubing, syringes, stopcocks, regional block needles and catheters, and urinary catheters. Critical equipment or semi-critical equipment that is sterilized at UTMB: follow manufacturer's instructions for use and UTMB *policy 01.05.02 Sterilization of Semi-Critical and Critical Medical Devices*.
- Semicritical equipment that is reprocessed by high-level disinfection (manually or automated): follow manufacturer's instructions for use and UTMB *policy 01.05.04 High Level Disinfection of Semi-Critical Medical Devices*. The following equipment shall be reprocessed by at least high-level disinfection between uses: laryngoscope blades, Magill forceps and temperature probes.

- The following equipment is considered non-critical and shall be cleaned with a detergent/disinfectant between uses unless they are disposable and single patient use and then should be discarded appropriately: blood pressure cuffs, skin temperature sensor cables, stethoscopes, blood warmers and infusion pumps. The exterior surfaces of anesthesia machines shall be cleaned daily.
- All anesthesia supplies shall be checked weekly for expiration dates. Outdated non-disposable packs shall be returned to Sterile Processing.

Medications

- Medications must be drawn up immediately prior to use.
- Medications shall be supplied in single dose vials when possible. If multi-dose vials of medications are used, they shall be dated when opened and discarded according to Pharmacy policy (*See Policy 02.22 Pharmacy*). Irrigation bottles of saline and water shall be discarded after each case.
- Medication drawn up in a syringe shall not be administered to more than one patient. The syringe is considered contaminated after it has been used to enter a vascular line. The syringe must be discarded once contaminated.
- Medication dispensed for one case and not used may be used for the next case provided it has not been contaminated and was drawn up less than 24 hours ago.
- Stopcocks, multi-dose vials, infusion ports on intravascular lines, and other portals of access to sterile fluids shall be handled with aseptic technique by wiping the septum with alcohol before each puncture, and always using a sterile needle to enter the system.
- Propofol must be drawn into a sterile syringe immediately after the ampule is opened and administration shall commence promptly. Each unit of propofol is intended for use in a single patient and the syringe and unused portion shall be discarded at the end of the surgical procedure.
- Tubing used to administer propofol must be changed every 6 or 12 hours, depending on its use, per manufacturer's recommendation.
- Whenever possible, needles shall not be removed from syringes. They shall be discarded as a unit. Mechanical devices shall be used to remove any needles that must be removed from the syringe.
- Use fluid containers and administration sets (tubing and connectors) for a single patient only. This includes disposable pressure transducers and tubing and other items that contact the vascular system or other sterile body fluids.

- The preferred method for medication dosing is unit dose packages. If multidose containers are used, they should be discarded if contaminated or if contamination is suspected.

Procedures

- Anesthesiology staff will not set up the "Hot line" in advance of cases.
- The arterial line/central venous pressure line will be set up for no longer than 24 hours. The lines will be labeled with date and time at assembly. After this time, the fluid and tubing will be discarded.
- IV fluids shall be set up immediately prior to use.
- Subarachnoid and epidural neural blockades must be done under strict aseptic technique, using a surgical mask, sterile gloves, sterile drape, and sterile prep with chlorhexidine gluconate.
    - Wear a surgical mask when injecting material into the spinal canal or subarachnoid space for spinal or epidural anesthesia.
    - The infusion line and solution should be changed every 96 hours.
    - The infusion system should not be entered except for changing the line and solution at 96 hours.
- For placement of intravascular devices, see *policy 01.18 Infection Control Guidance for Central Lines and Other Infusion Devices*.

References

1. Herwaldt LA, Pottinger JM, Coffin SA, Schulz-Stübner S. Nosocomial infections associated with anesthesia. In: Mayhall CG, ed. Hospital Epidemiology and Infection Control. Philadelphia: Lippincott Williams and Wilkins 2004:1073-1115.
2. Centers for Disease Control and Prevention. Guidelines for the prevention of intravascular catheter-related infections. MMWR 2002; 51(No. RR-10):1-33.
3. Brooks K, Pasero C, Hubbard L, Coghlan RH. The risk of infection associated with epidural analgesia. Infect Control Hosp Epidemiol 1995; 16:725-726.
4. Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. June 2007. http://www.cdc.gov/ncidod/dhqp/pdf/isolation2007.pdf