VANDERBILT UNIVERSITY MEDICAL CENTER
DIVISION OF TRAUMA AND SURGICAL CRITICAL CARE

Bedside Surgery Protocol

1. Indications
    a. Decompressive celiotomy for abdominal compartment syndrome
    b. Exploratory celiotomy for acute hemodynamic decompensation due to hemorrhage
        i. should be reserved for patients who are prohibitive risks for OR transport
    c. Reexploration of a previous open abdomen for dressing change or closure
    d. Exploratory celiotomy to rule out intra-abdominal sepsis in a patient whose physiologic condition prohibits safe transport to the operating room
    e. Percutaneous tracheostomy
    f. Percutaneous gastrostomy
    g. Bronchoscopy
    h. Decompressive colonoscopy
2. Bedside surgery protocol: General
    a. Critical care attending and the operating surgeon should be present for the entire surgical procedure
    b. Critical care attending will oversee the anesthetic management of the patient
        i. intravenous general anesthesia
            a. anxiolysis
                i. e.g. propofol, Versed, Ativan, ketamine
            b. analgesia
                i. e.g. fentanyl, morphine, hydromorphone, ketamine
            c. chemical paralysis as needed
                i. vecuronium, cis-atracurium, rocuronium
        ii. optimize ventilator settings
            1. place patient on mandatory rate at 100% FiO2
            2. volume control preferred, particularly for percutaneous tracheostomy
    c. Obtained informed consent if procedure not emergent
    d. Preprocedure timeout to be performed by surgical team, procedure support staff, and bedside nursing
        i. surgical team availability
        ii. laterality or level
        iii. verified patient medical record number
        iv. review allergies
        v. procedure verification
        vi. SCIP criteria?
        vii. informed consent
        viii. appropriate instruments available
        ix. special considerations?
    e. Bedside nurse and respiratory therapist will monitor the patient and record the procedure vital signs on conscious sedation sheet
        i. monitors: ECG, blood pressure (arterial line/Q5 minutes), pulse oximetry, ICP as indicated, ventilator settings
    f. Critical care or procedure attending signs the sedation sheet postprocedure
    g. Sterile perimeter will be set up in the patient's room.

h. All individuals within sterile perimeter must wear personal protective equipment
    i. i.e. surgical cap, mask, eye protection
i. All members of the operative team must decontaminate hands as per OR routine
j. prophylactic antibiotics indicated only if new surgical wound is made
    i. antibiotic choice per surgeon preference based on degree of case contamination
k. Chlorprep agent of choice for skin preparation unless contraindicated
l. Indication to proceed to the operating room (level 1)
    i. surgeon preference
    ii. uncontrollable hemorrhage
    iii. instrumentation requirement exceeding bedside capability
m. Procedures are documented in Star forms by participating house staff and signed by Attending staff in a timely fashion.

3. Bedside laparotomy considerations
    a. Electrocautery will be available as needed.
    b. Wall suction canisters available with tubing and Yankauer tips.
    c. 4 L of warm crystalloid solution available.
    d. A standard bedside celiotomy tray including suture will be set up on the sterile field.
    e. Vacuum pack changes for damage control celiotomy
        i. every 48-72 hours
        ii. typical dressing includes bowel isolation bag, safety towels with radiographic marker, 10/19 Fr. JP drains, and adhesive barrier dressing
        iii. proprietary dressings may be used as suitable (KCI Abthera)
4. Bedside tracheostomy considerations
    a. High risk patients must be identified preprocedure.
        i. Morbid obesity
        ii. airway edema
        iii. cervical trauma
        iv. extremes of age
        v. other considerations
            1. Mandibulomaxillary fixation
            2. Halo brace
            3. High ventilator settings
                a. FIO2 >50%
                b. PEEP >10
            4. bleeding diathesis
            5. anatomical considerations
    b. Consideration should be given to bronchoscopic guidance versus conversion to open procedure either a bedside or in the operating room
    c. Proximal XLT tracheostomy should be selected for patients with significant obesity
    d. Blue Rhino percutaneous tracheostomy kit, cutdown instrument set, appropriate suture, tracheostomy soft pack, tracheostomy tube (typically 8 Shiley), intubation tray, and tidal CO2 monitor, difficult airway bag.
    e. Withdrawal of endotracheal tube must be performed by experienced personnel with care to avoid inadvertent extubation.
    f. Confirmation of endotracheal placement of tracheostomy is by physical examination, CO2 color change, and inspired tidal volume ~expired tidal volume.

g. Tracheostomy secured with suture and neck strap.
h. Post procedure chest x-ray is recommended.

5. Bedside PEG considerations
    a. Video gastroscope.
    b. Bard PEG (pull-type) feeding tube kit, 20-French.
    c. T-fasteners may be utilized for patients with malnutrition or immunosuppression.
    d. T-fasteners this are to be cut no later than date 10.
    e. Cutdown instrument set and appropriate suture (e.g. 2-0 nylon or silk).
    f. Notation is made regarding site of gastrostomy tube as well as depth both in the procedure as well as the nursing note.

Revised 2011, Oliver Gunter, M.D., FACS