Supplementary Online Content


eAppendix. Description of Outcomes

This supplementary material has been provided by the authors to give readers additional information about their work.
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1. Deep vein thrombosis (DVT)/Thrombophlebitis: The formation, development, or existence of a blood clot or thrombus within the vascular system, which may be coupled with inflammation. This diagnosis is made by the surgeon and may include confirmation by a venogram. The patient must be treated with heparin and/or coumadin or warfarin, and/or placement of a vena cava filter or clipping of the vena cava.

2. Pulmonary Embolism: Lodging of a blood clot in a pulmonary artery with subsequent obstruction of blood supply to the lung parenchyma. The blood clots usually originate from the deep leg veins or the pelvic venous system. The patient must have a V-Q scan interpreted as high probability of pulmonary embolism or a positive pulmonary arteriogram or positive CT scan. Treatment usually consists of:
   - Initiation of anticoagulation therapy
   - Placement of mechanical interruption (e.g. Greenfield Filter), for patients in whom anticoagulation is contraindicated or already instituted.

3. Deep wound surgical site infection (SSI, same as Centers for Disease Control [CDC] definition): Deep Incision SSI is an infection that occurs within 30 days after the operation and the infection appears to be related to the operation and infection involved deep soft tissues (e.g., fascial and muscle layers) of the incision and at least one of the following:
   - Purulent drainage from the deep incision but not from the organ/space component of the surgical site.
   - A deep incision spontaneously dehisces or is deliberately opened by a surgeon when the patient has at least one of the following signs or symptoms: fever (> 38 C), localized pain, or tenderness, unless site is culture-negative.
   - An abscess or other evidence of infection involving the deep incision is found on direct examination, during reoperation, or by histopathologic or radiologic examination.
   - Diagnosis of a deep incision SSI by a surgeon or attending physician.
   - Note: infection that involves both superficial and deep incision sites is reported as deep incisional SSI.
   - an organ/space SSI that drains through the incision is reported as a deep incisional SSI.

4. Superficial surgical site infection (same as CDC definition): Superficial incisional SSI is an infection that occurs within 30 days after the operation and infection involves only skin or subcutaneous tissue of the incision and at least one of the following:
   - Purulent drainage, with or without laboratory confirmation, from the superficial incision
   - Organisms isolated from an aseptically obtained culture of fluid or tissue from the superficial incision.
   - At least one of the following signs or symptoms of infection: pain or tenderness, localized swelling, redness, or heat (and superficial) incision is deliberately opened by the surgeon, unless incision is culture-negative.
   - Diagnosis of superficial incisional SSI by the surgeon or attending physician.
   - Note - the following conditions are not considered as SSI:
     - Stitch abscess (minimal inflammation and discharge confined to the points of suture penetration).
     - Infected burn wound.
     - Incisional SSI that extends into the fascial and muscle layers (see deep incisional SSI).

5. Total Morbidity: Patient outcomes after operation were assessed per VASQIP protocol. Morbidity was defined as a patient having 1 or more of the 20 predefined specific postoperative complications up to 30 days after the operation. Outcomes were adjusted for a uniformly defined set of 60 patient preoperative risk factors, surgical complexity (measured using work relative value units), and surgical service. VASQIP data were abstracted from the medical record by trained nurses with clinical backgrounds. Data completeness was monitored centrally.

6. Mortality: Mortality was defined as patient death in or out of the hospital from any cause within 30 days after the operation.