Retained item  
Domain 3, Intraoperative activities

While circulating for an abdominal hysterectomy, a 1" Penrose drain is found in the peritoneum from an open cholecystectomy performed 15 years ago. What is the best response to this situation? Provide the evidence-based rationale for your answer.

Response:
The issue of retained surgical items (RSI) is a hot topic. In addition to being considered a sentinel event requiring a Root Cause Analysis (RCA) and filing a report with the Joint Commission, since Oct. 2008 the Centers for Medicare and Medicaid (CMS) no longer reimburse hospitals for expenses incurred during cases involving a retained surgical item. From a legal standpoint, an RSI is virtually indefensible; proof of negligence is not required. In legal terms this is known as “the thing speaks for itself”, or Res ipsa loquitur.

Typically an RSI is the result of multiple human errors, including communication breakdown and processes failure. Cases especially at risk include those of an emergent nature (in which counts are typically waived), those involving patients with a high body mass index, and cases in which there is an unplanned change in operation (Rowlands, 2012). When a case falls into one of these categories, staff must be especially vigilant.

There is much in the literature (see references) about how to avoid an RSI; less is written about what should be done when one is found. In this example, an occurrence report must be filled out and the incident reported to regulatory agencies. Disclosure of the RSI to the patient is mandatory medical practice and part of sound ethical practice. The drain should be listed as a specimen and sent to the laboratory for gross identification. Exploration of the abdomen for additional sequelae (fistulas, adhesions, or chronic inflammation) and corresponding surgical interventions related to the RSI should be listed as part of the operation. A Root Cause Analysis (RCA) or Healthcare Failure Mode and Effect Analysis (HFMEA) should be conducted as part of the investigation of any system breakdown. The report should include the length of time between patient complaint of signs and symptoms of a RSI, e.g., pain, sepsis, bowel obstruction and the time of discovery (which may or may not include surgical intervention).

Well-defined standardized counting methods supported by policy, good communication techniques, and using a team approach to the count process will decrease the incidence of RSIs. Assistive technology (bar coding, radiofrequency identification) that serves as an adjunct to traditional methods of counting is showing some promise as a way to locate retained sponges, especially since most of these retained surgical items occur in those procedures in which a correct count was announced (Cima et al, 2008). Some facilities are advocating the routine use of high-resolution radiographic screening prior to admission to the postanesthesia care unit for all abdominal procedures (Cima, et al, 2008; Ugochukwu & Edeh, 2011). Before adopting this practice, the cost of the diagnostic procedure, the time involved, and the risk of radiation exposure to patient and staff should be weighed against the benefits of timely identification of an RSI. It should also be noted that JC regulations related to an RSI discovered after the incision is closed, but before the patient is transferred from the OR, is still considered a sentinel event (JC, 2007).

Some strategies (many of which are low or no cost) to decrease the incidence of RSIs include:
1. Review and revision of facility policies on prevention of RSIs with staff and physician participation.
2. Collaboration with radiology department. Norton et al described a process in which the specific reason for the OR film was communicated to the radiologist (e.g., missing 4x4) to help ensure that the final report would rule out that missing item. In addition, sample x-rays were taken of commonly counted items which were then available as a “library” on the hospital intranet to both surgeons and radiologists to aid in the accuracy of radiograph interpretation. Edel (2010) described a process where a replica of the missing item was x-rayed at the time of the incorrect count and the radiologist reviewed both films to compare the one of the missing item with that of the actual patient’s.
3. Initiating a “wound closure time out” that incorporates both a cavity sweep and closing count, the status of which is communicated to the team.
4. Use of dry-erase count boards (Edel, 2010) and clear plastic sponge holders that are visible to the entire team.
5. Standardizing trays and count sheets.
6. Reducing staff turnover during procedures.
7. Discouraging interruptions during the count.
8. Withholding dressing sponges until the final count is complete.

Perioperative nurses, as both patient advocates and perioperative experts, are in a good position to help develop processes which will prevent RSIs that are both cost effective and promote maximum patient safety.

References and resources:


NoThing left behind®. (2013). Retrieved April 8, 2014 from http://www.nothingleftbehind.org/ Note: The goal of this educational site is to “develop and disseminate evidence and experience-based best practices” for the use of healthcare organizations to aid in preventing retained surgical items.

