

FOCUS ON FIVE

Preventing Retained Foreign Objects

Improving safety after surgery



Mortality rates resulting from unintended retention of foreign objects are as high as 11% to 35%, and surgical items are left in 1,500 people per year in the United States.¹ Furthermore, in a recent case-control study of retained surgical items involving 54 patients, it was discovered that in 69% of the cases, the retained items were sponges, and in 31% they were instruments including clamps, retractors, and electrodes. More than half (54%) of the foreign bodies were left in the abdomen or pelvis, 29% in the vagina, 7% in the thorax, and the rest were found elsewhere. In addition, the risk of retention is significantly increased in emergency surgeries, in those that include unplanned procedures, and in patients with high body mass indexes.² These risk factors are similar to those for wrong-site surgery and other surgical complications.

For these reasons, and recognizing that this is a preventable event, the unintended retention of foreign objects in patients after surgery is one of the items included under the Joint Commission's definition of *sentinel event*, even when the outcome is not death or major permanent loss of function. As such, the Joint Commission requires that a root cause

analysis be conducted and strongly encourages health care organizations to report the event.

"It is important to perform a root cause analysis and identify the problem related in the process that led to the error," says Ramona Conner, R.N., M.S.N., C.N.O.R., a perioperative nursing specialist with the AORN, a professional organization of perioperative registered nurses.

Patient safety experts say surgical objects left in a patient is a preventable occurrence if appropriate precautions are followed. Here are five strategies to help prevent this event. **PS**

References

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2. Gawande A.A., et al.: Risk factors for retained instruments and sponges after surgery. *N Engl J Med* 348:229-235, Jan. 16, 2003.
3. AORN's Recommended practices for sponge, sharp, and instrument counts is up for review. *Infection Control Today*. <http://www.infectioncontroltoday.com/articles/551feat1.html> (accessed Dec. 13, 2005).
4. Beyea S.C.: Counting instruments and sponges. *AORN J* 78:290, 293-294, Aug. 2003.
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1. Establish clear, concise count policies and procedures and follow them. These should cover sponges, sharps, and other surgical instruments used in all surgical procedures. An accurate count is vital to patient safety. Do sponge and other counts before the procedure to establish a baseline, before closure of a cavity within a cavity, before wound closure begins, at skin closure or end of procedure, and at the time of permanent relief of either the scrub person or the circulating nurse. Two individuals, one of whom is the circulating nurse, should separate and audibly count sponges. If additional sponges are added to the field, they should be counted and recorded at the time they are added.³ Risk factors that can cause incorrect counts include sponges being added to the field while counting nurses are out of the room, excessive talking during counts, placing of sponges in cavities for packing during the case, and nurses' signing for counts that were not performed.⁴

2. The surgeon should routinely inspect or explore the operative field. This is especially recommended following procedures that are known for risk of retention of a foreign object, such as emergency surgeries, cases with unplanned changes in procedure, and cases with patients who have high body mass indexes.

3. Use only radiopaque sponges on the sterile field to facilitate identification on a radiograph. Most instruments and sharps are radiopaque. A sponge should not be cut in half because doing so may destroy the radiopaque marker. Use radiopaque towels when towels will be placed in a body cavity. If a towel is used for packing, the scrub person must inform the circulating nurse, who adds the towel to the count sheet. The closing count includes verification that the towel has been removed. A better alternative would be to use towels that have x-ray-detectable strips and are designed specifically for packing.⁴

4. Follow established procedural steps if a discrepancy in the count is found. This includes manually inspecting the operative site, the area surrounding the surgical field, including the floor, and linen and trash receptacles. An intraoperative x-ray should be performed and then read by a radiologist before the patient leaves the operating room.

5. Document all counts. This includes results of the surgical item count, verification that the surgeon has been notified of the count, notations when instruments are intentionally retained as packing, actions taken in case of discrepancies in the count, and any reasons for not performing a count according to policy.⁵