



The intra-operative period — Unintentionally retained surgical items

About one quarter of the CMPA’s medico-legal cases between 2009-2013 involved a surgical procedure. In analyzing these legal, regulatory authority (College), and hospital cases, the Association found that while issues occur at every stage of surgical care, most arise during the surgery itself. One important issue is unintentionally retained surgical items.

An item unintentionally left behind after surgery is a “never event,” which is defined as “a serious, largely preventable patient safety incident that should not occur if the available preventative measures have been implemented by healthcare providers.”¹ Though instances of retained surgical items are rare, Canada ranks among the worst of all countries in the OECD (Organisation for Economic Co-operation and Development) for the incidence of these issues.²

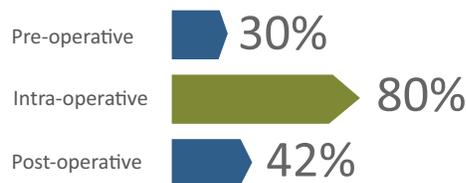
→ CONSIDER THIS...

A general surgeon is operating on a 46-year-old male with suspected appendicitis. He encounters a severely inflamed appendix that splits upon removal, soiling the surrounding tissues. When it is time to close the incision, the operating nurses report that all sponges are accounted for. The surgeon visually inspects the wound and does a manual search before closing. The patient is discharged a few days later. Over the ensuing weeks and months, the patient experiences abdominal pain that leads him to visit the ED and his family physician on a number of occasions. Six months post-surgery, an investigative X-ray shows a radio-opaque sponge in the patient’s abdomen. The patient undergoes surgery to remove the retained sponge. The patient files a legal action against the surgeon and hospital. Experts generally opine that the prevention of retained surgical item is a shared responsibility between the surgeon and nurses.

→ WHAT DOES THIS MEAN FOR CMPA MEMBERS?

A retained surgical item can lead to serious consequences that patients may only experience months or years later. Complications in these cases most often included pain and infection, which led to the need for additional surgeries. Some cases, however, had more severe outcomes including death. These events mostly result in unfavourable medico-legal outcomes, with settlements frequently shared with the hospital because of the actions of another healthcare provider or a system issue.

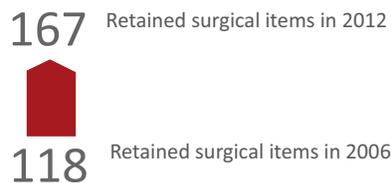
Distribution of closed CMPA legal cases involving a surgery by perioperative period (n = 938)



Excludes obstetrical cases. Cases may involve issues in more than one area of surgical care, therefore percentages do not add up to 100%.

The statistics:

In Canada, the trend for the incidence of retained surgical items has been increasing, with a low of 118 in 2006 and a high of 167 in 2012.



Statistics are based on 2004-2012 CIHI data excluding Québec.

→ ISSUES TO CONSIDER

The CMPA experience in these cases revealed the following:

- Consistent with the literature, patient characteristics such as obesity or history of other surgeries were associated with retained surgical items, as were complex or complicated surgeries (e.g. those where excess bleeding occurs, or when a change in approach is required).
- In the majority of cases, sponge or equipment counts were reported as correct, pointing to inadequate systems.

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ACTION FOR SAFE MEDICAL CARE **Intra-operative period**

- In other cases, safety protocols were not followed by the operating room team or were non-existent. Occasionally, because of the length of time between the surgery and the discovery of a retained item, it was not possible to determine if protocols existed at the time of the event.
- Occasionally, items not considered part of the regular surgical count were left inside the patient. Inadequate follow-up of items intentionally left in place to be removed at a later time was also an issue.
- Failing to check instruments for completeness after surgery, as per proper procedure, was also a factor in cases of retained items.

→ RISK REDUCTION REMINDERS

Retained surgical items continue to represent a serious patient safety issue. Preventing occurrences of retained items is typically considered a team responsibility, shared between the surgeons and the operating room nurses, though there are exceptions.

The following points can assist surgeons in managing risk:

1. Adherence to clear procedures that detail how and when the sponge and equipment count is to be conducted; what items need to be counted and inspected for completeness; and how to follow up on incorrect counts (e.g. X-ray, wound exploration) or items temporarily left in place, can help prevent complications from retained surgical items.
2. Documentation of a surgical item or temporary device that must be removed can reduce risk. For example, a surgeon may insert a stent temporarily, with the intention of removing it after a specific period of time. By documenting the need to remove the stent, surgeons can ensure the action is not forgotten. As well, surgeons should consider the possibility that a patient with a post-operative infection or prolonged wound healing has retained a surgical item.
3. Occurrences of a retained surgical item must be disclosed to the patient and reported in accordance with relevant policies and procedures.

→ LEARN MORE BY ACCESSING THESE RESOURCES

Articles

Surgical safety checklists: A team approach to patient safety

Handbook

Communicating with your patient about harm: Disclosure of adverse events

CMPA Good Practices Guide

Adverse events—Disclosure

Reducing risk in surgery

1. National Patient Safety Agency. Never events annual report 2009/2010, October 2010. Retrieved on March 14, 2014 from: <http://www.nrls.npsa.nhs.uk/resources/?entryid45=83319>
2. Canadian Institute for Health Information. *Benchmarking Canada's Health System: International Comparisons*. November 2013. Retrieved on March 17, 2014 from: https://secure.cihi.ca/free_products/Benchmarking_Canadas_Health_System-International_Comparisons_EN.pdf

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