

## Retained materials in surgery

Seven cases of retained materials in surgery were reported as sentinel events to Safer Care Victoria between 1 July 2016 and 30 June 2017. The number of these reports is largely unchanged over the past ten years, and retained surgical instruments, drain tubes and guidelines continue to be a serious surgical issue in Victoria. The Victorian Surgical Consultative Council (VSCC) and Safer Care Victoria continue to review cases and provide feedback to health services to prevent such events.

This information bulletin presents a summary of three adverse events related to retained materials that occurred in Victoria. Each of these cases occurred because materials were not appropriately accounted for in the surgical process. We aim to raise awareness of the complexities of our surgical services and the need for more robust count processes.

### LESSONS LEARNED FROM THE REVIEW OF SENTINEL EVENTS

#### Case 1

The patient was admitted for an elective cardiothoracic procedure. At the end of the procedure, the surgical count was noted to be correct. However, a routine post-operative x-ray detected a nut from the valve replacement deployment device in the patient's pericardium. The patient returned to theatre to have the nut removed.

#### Contributing factors

The deployment device was disassembled during the procedure, but was counted as one whole item on the count sheet, as opposed to the number of its parts.

#### VSCC recommendations

All detachable components of an instrument/retractor should be included in the surgical count.

The VSCC will work with the Royal Australasian College of Surgeons and the Australian College of Perioperative Nurses to provide guidelines and education to surgical teams.

#### Case 2

The patient required a central venous catheter to be inserted for the administration of antibiotics following an admission for meningococcus. Due to the registrar being interrupted several times during the insertion of the central venous catheter, the guidewire was inadvertently retained. The guidewire was detected during a scheduled chest computed tomography (CT) scan. The wire was removed the following day by an interventional radiologist.

#### Contributing factors

The Central Venous Catheter insertion guideline does not specify the requirements for ensuring the guidewire has been removed following the insertion.

The electronic clinical information system was not working that day so documentation about the insertion did not take place until the following day.

The registrar was interrupted several times during the procedure.

#### VSCC recommendation

Retained guidelines can lead to serious harm and documentation of their removal is essential.

Guide wires should have the same documentation standards as any other medical device.

### Case 3

The patient was admitted for a lengthy surgical specialty case, including an aortic valve replacement, coronary artery bypass and a right lower lung wedge resection. A drain tube was inserted into the chest, which required cutting to size. This created two pieces of tubing, one of which was retained. A routine post-operative chest x-ray five days later identified the tubing. The patient had video-assisted thoracoscopic surgery to remove the retained section of the drain tube.

#### Contributing factors

The excess tubing was not handed off to the neutral area after cutting. The count sheet does not account for the cutting of drains.

#### VSCC recommendation

The consultant in charge of any case should satisfy themselves that the count is correct prior to beginning closure, with drains enjoying the same significance as packs in the mind of the surgeon.

### ABOUT THE VSCC

The VSCC advises the Minister for Health and the Department of Health and Human Services on the quality and safety of surgical practice in Victoria.

The VSCC aims to identify and report on avoidable causes of mortality and morbidity relating to surgery, and to provide strategic advice and recommendations on ways to improve the performance of surgical services.

It works closely with the Victorian Audit of Surgical Mortality (VASM), the mortality audit managed by the Royal Australasian College of Surgeons, to conduct clinical audits into any deaths under surgical care, and to prepare and promulgate practice guides for surgeons, trainees and hospital administrators.

### MORE INFORMATION

Download the Victorian Surgical Consultative Council chairperson's triennial report 2015-2017 at [safercare.vic.gov.au](http://safercare.vic.gov.au).

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