



Retained Surgical Instrument in Minimally Invasive Surgery

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Dear editor,

The aim of this review is to elucidate the extent of RSI (retained surgical instrument) in MIS (minimally invasive surgery). It's a misperception that MIS is safer with regard to risk of retention of instruments in body cavities. Even in MIS, there is a chance of losing small gauze piece, broken needles and broken tip of instruments in body cavities. We want to share our experience with regard to a rare instance of RSI during laparoscopy. Our patient underwent TLH with BSO for endometriosis and fibroid uterus. After surgery, we presumed that claws are intact so we didn't open the claws and examine for any missing claws. Six hours after completion of surgery, while cleaning instruments, part of a claw of harmonic scalpel was found missing. We did an abdomen and pelvis X-ray which showed a small radio-opaque foreign body of size 1 cm in pelvis. Informed consent was taken, and laparoscopy was performed the next day. Abdomen was visualised through the same ports, and a search for the foreign body under the guidance of C-arm was done. It was located and removed through the same ports and identified as the claw of harmonic scalpel as suspected (Fig. 1). Patient made an uneventful recovery after the procedure.

We know that retention has very little to do with patient characteristics, and it's the operation room culture which matters. The definition of RSI is: surgical item is considered to be retained when it is found within the patient body after the patient is out of the operation theatre [1]. It can be discovered hours to years after the initial operation, and usually a second surgery is required for its removal. Retained sponges and instruments due to surgery is a recognised medical “**NEVER EVENT**” and has catastrophic implications

over the patients. The multi-stakeholder operating room and communication between each other will decrease the problems of RSI. To work with multiple healthcare stakeholders to make sure RSI becomes a true never event that was started in 2004 [2]. Prevention of RSI policy was newly revised in 2015 to develop and disseminate evidence and experience-based best practices, derived from clinical event analysis and the consensus effort of groups of perioperative personnel.

Currently, there is no standard care on how to manage a retained needle or small foreign body during laparoscopic surgery. There are reports of complications associated with retained surgical foreign bodies; however, the true risk of RSI is not known. As there are no data other than individual case reports on the frequency of retention in hospitals around the world. RSI in laparoscopy whether to open or observe is still debatable.

Conclusion

Various authors brought attention to this problem on intraperitoneal retained sponges by bringing together the world's literature of cases and concluded these events were not rare and were highly preventable.

Individual vigilance and effort of nursing colleagues along with proper system process are desirable for the decrease in the incidence of RSI. We need radiology technologists to take high-quality and complete intra-operative films, and we need radiologist to interpret the findings expeditiously. Most importantly, we need surgeons to do their best to perform methodical wound examination in every case.

So, we are trying to convey a message through this article, as we came across a rare situation of missing a claw of an instrument. Surgeons and OT staff should be vigilant and should properly examine the instruments along with counting mops and gauges after every surgery.

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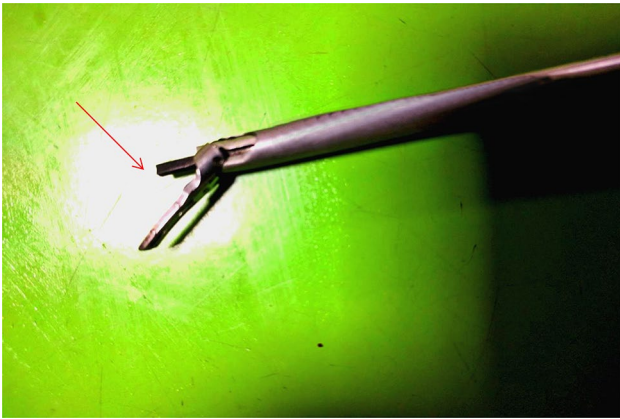


Fig. 1 Missing claw of harmonic scalpel

Compliance with ethical standards

Conflict of interest All the authors declare that they have no conflict of interest and they have not received any grant.

Human and animal consent This article does not contain any studies with human or animal subjects, and it is a case report.

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