



Retained Surgical Drain Fragments: A Systematic Review and Case Report	
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Abstract: Aim: Retained surgical drains are an avoidable and serious cause of postoperative morbidity. This study aims to first report on our unit's experience in identifying and managing retained surgical drains and then consolidate current knowledge regarding retained surgical drains, causes and associated complications. Patients and Methods: A systematic review of the literature was performed through searches in electronic databases to identify studies that described incidents involving retained surgical drains. Data were extracted regarding patient and operative characteristics, drain complications and management. Results: A total of 36 case reports and/or series were identified in the literature, with39 individual cases of retained surgical drains in patients undergoing abdominal, thoracic or orthopedic procedures. The most common cause for retained drain was fracture of drain tubing. Patients presented with complications ranging from chronic pain, abscess or fistula formation, to migration of the drain fragment into a hollow viscus. In all cases an invasive intervention was required to remove the retained drain. Conclusion: Surgeons should be aware of retained surgical drains as an iatrogenic cause of postoperative morbidity. Contemporary surgical practice should include methods to prevent, identify and manage retained drains and associated complications.	

Keywords: case reports, complications, cytoreductive surgery, retained drain



