

Beyond Bowel Obstruction: A Narrative Review of Gallstone Ileus and its Evolving Surgical Management

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ABSTRACT

Gallstone ileus (GSI) is an uncommon but potentially life-threatening mechanical bowel obstruction caused by impaction of a large gallstone within the small intestine. This unique and interesting condition has an unusual pathophysiology, leading to non-specific clinical presentations, including the characteristic "tumbling phenomenon". Various imaging modalities confirm the diagnosis when the condition is clinically suspected; however, despite their availability, only 50% of patients receive an accurate preoperative diagnosis. The elusive nature of GSI frequently delays diagnosis, leading to high morbidity and mortality. Therefore, early recognition and prompt intervention are crucial for improving patient outcomes. Surgery remains the cornerstone of treatment, most commonly via laparotomy, though laparoscopic and robotic-assisted techniques are increasingly utilized. Nevertheless, the optimal surgical approach remains controversial and an ongoing research topic. This review provides an overview of GSI and evaluates the evidence supporting different surgical strategies, including recent updates in surgical practice. By examining the available data, identifying key factors influencing outcomes, and reviewing the few available guidelines and recommendations, this review contributes to a better understanding of best practices in the surgical management of this challenging condition.

Keywords: Enterolithotomy, gallstone ileus; laparoscopic surgery; one-stage; two-stage

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