

Ventral Hernia Repair and Drainage – A Prospective, Observational, and Comparative Study of Outcomes

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Abstract

Background: While ventral hernia repair is a frequent surgical intervention, the possibility of complications remains present. The use of drains to mitigate complications is a topic of debate, with conflicting evidence. This study aimed to evaluate the association between drain usage and post-operative complications in ventral hernia repair.

Materials and Methods: A single-center prospective study included patients undergoing ventral hernia repair from 2018 to 2022. Patient data and surgical techniques were recorded. Statistical analysis was performed to assess risk factors for drain insertion and complications.

Results: Of the 216 patients included, 19.44% had diabetes, and 20% had cancer. Postoperative complications (Clavien Dindo \geq grade IIIB) occurred in 9.3% of cases, resulting in a 3.7% mortality. Decision factors for drain insertion included older age, larger hernia size, bowel resection with anastomosis, emergency setting and the need for adhesiolysis. No differences were found between the two groups regarding seroma and hematoma formation and mesh infection. Patients with drains had a longer hospital stay and higher costs.

Conclusion: The decision to use drains in ventral hernia repair was influenced by surgical complexity factors rather than patient characteristics. While drain usage did not correlate with postoperative morbidities, it was associated with longer hospitalization and higher costs. Individualized decision-making is crucial to balance complications and resource utilization in ventral hernia repair.

Key words: ventral hernia repair, drains, complications, risk factors, hospitalization, costs