Poster #9

Emergency management of Acute Malignant Left-Sided Colonic Obstruction: Colonic Stenting versus Emergency Surgery

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Background

Acute malignant left-sided colonic obstruction (AMLCO) is a frequent emergency department (ED) presentation in patients with colorectal cancer and is associated with significant morbidity, mortality, and resource utilization. Initial management decisions are often made in the acute care setting and directly influence surgical outcomes, stoma formation, and downstream care. Self-expanding metal stents (SEMS) have emerged as an alternative emergency strategy to decompression followed by elective resection, but their role in emergency oncologic care remains debated.

Methods

A comparative analysis of primary studies was performed, including randomized controlled trials (RCTs) and large cohort studies evaluating SEMS as a bridge to surgery (BTS) versus emergency surgery (ES) for AMLCO. Meta-analyses and narrative reviews were excluded. Outcomes relevant to emergency care were assessed, including short-term mortality, postoperative morbidity, primary stoma rate, primary anastomosis rate, and long-term oncologic outcomes when available.

Results

Across RCTs, short-term mortality was similar between SEMS and ES (approximately 6–10%). SEMS was consistently associated with lower postoperative morbidity (approximately 33–40% vs 45–60% with ES) and significantly reduced primary stoma formation (around 20–30% vs 45–60%). Rates of primary anastomosis were higher following SEMS (up to 65–70%) compared with ES (30–45%).

OUTCOME	SEMS (Bridge to Surgery)	Emergency Surgery	Clinical Impact
SHORT-TERM MORTALITY	Similar (≈6–10%)	Similar (≈6–10%)	No survival disadvantage
POSTOPERATIVE MORBIDITY	Lower (≈33–40%)	Higher (≈45–60%)	Fewer complications
PRIMARY STOMA RATE	Lower (≈20–30%)	Higher (≈45–60%)	Improved quality of life
PRIMARY ANASTOMOSIS	Higher (≈65–70%)	Lower (≈30–45%)	More definitive surgery
LONG-TERM ONCOLOGIC OUTCOMES (OS, DFS)	Similar	Similar	No oncologic compromise

Table 1. *Comparison of Emergency Management Strategies for Acute Malignant Left-Sided Colonic Obstruction*

Large cohort studies confirmed higher complication rates, longer hospital stays, and increased stoma formation following ES. Long-term follow-up from randomized trials demonstrated no significant differences in overall survival (OS) or disease-free survival (DFS), suggesting no oncologic disadvantage associated with SEMS when performed in experienced centers.

Conclusions

In patients presenting to the ED with AMLCO, SEMS as a bridge to surgery represents a safe and effective emergency management strategy, offering improved short-term outcomes and reduced stoma formation without compromising long-term oncologic results. These findings support the incorporation of SEMS into emergency oncologic care pathways in centers with appropriate multidisciplinary expertise.

References

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