

Comparison of extended right hemicolectomy, left hemicolectomy, and segmental colectomy for splenic flexure colon cancer: A systematic review and meta-analysis

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Objectives:

To compare the outcomes of extended right hemicolectomy (ERH), left hemicolectomy (LH), and segmental colectomy (SC) for the surgical management of splenic flexure tumours.

Methods:

In compliance with PRISMA statement standards, a systematic review was performed to identify all studies comparing outcomes of ERH, LH, and SC for the surgical management of splenic flexure tumours. Primary outcomes included anastomotic leak and all postoperative complications. The secondary outcomes included operative time, R0 resection, number of harvested lymph nodes, >12 harvested lymph nodes, severe complications, postoperative mortality, paralytic ileus, wound infection, pancreatic fistula, intra-abdominal abscess, need for reoperation, length of hospital stay, 5-year overall survival and 5-year disease-free survival. ROBINS-I tool and GRADE system was used to assess the risk of bias and certainty of evidence, respectively.

Results:

Analysis of 956 patients from seven observational studies showed that ERH was associated with more paralytic ileus compared with LH (OR: 2.74, P=0.002) and SC (OR:6.67,P<0.0001) and the operative time was shorter in SC compared to ERH (MD: 25.48,P<0.0001) and LH (MD:-17.94, P=0.0002). There were no differences between ERH, LH, and SC in terms of anastomotic leak, postoperative complications, R0 resection, severe complications, postoperative mortality, wound infection, pancreatic fistula, intra-abdominal abscess, need for reoperation, length of hospital stay, >12 harvested lymph nodes, 5-year overall survival, and 5-year disease-free survival.

Conclusions:

The available evidence, limited to observational studies, suggests no difference between ERH, LH, and SC in terms of postoperative morbidity and mortality, lymph node yield and cancer survival. Randomised controlled trials are required for definite conclusions.

Biography

Nisha Mallya studied her M.B.B.S in Kasturba Medical College, India. She is currently training to be a surgeon. She has worked in Orthopaedics, the Accident and Emergency Department, General Surgery and Intensive Care Unit.