Defunctioning stoma in low anterior resection of the rectum for cancer: Aspects of stoma reversal, anastomotic leakage, anorectal function, and cost-effectiveness.

av

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Akademisk avhandling

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Abstract


Rectal cancer is a common malignancy treated with surgical resection and curative intent in the majority of cases. One treatment option is low anterior resection (LAR) with preserved bowel continuity, often involving the formation of a temporary defunctioning stoma (DS).

The general aim of this thesis was to improve understanding of the role of DS in rectal cancer surgery with regard to timing of stoma reversal and development of anastomotic leakage (AL), impact on long-term anorectal function (AF), as well as aspects of cost-effectiveness.

Study I addressed the timing of stoma reversal following LAR. We found that 19% of reversed patients were reversed within 4 months of LAR, while 81% of reversals were delayed. In 58% of delayed reversals the delay was due to low priority on surgical waiting lists.

Studies II-IV were based on 234 patients randomized to receive a DS or no DS following LAR. Study II compared patients with AL following LAR diagnosed during the initial hospital stay (early leakage, EL) with patients diagnosed after hospital discharge (late leakage, LL). LL was more common in females, and originated more frequently from the transverse stapler line. EL was more common in males, and originated more frequently from the circular stapler line. Study III assessed AF 5 years after LAR with regard to whether patients initially had a DS or no DS. We found no difference in AF between the two randomized groups. When comparing with a 1-year follow-up in the same patient cohort, there were no further changes in AF over time. Study III assessed necessary healthcare resources and cost within 5 years of LAR, depending on whether patients initially had a DS or no DS. The overall cost analysis revealed a higher cost for patients randomized to DS, regardless of the cost-savings associated with a reduced frequency of anastomotic leakage.

Keywords: rectal cancer, low anterior resection, defunctioning stoma, stoma reversal, anastomotic leakage, anorectal function, costs, resources

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