Colorectal Disease 2017, Sep

Risk Factors for Unfavourable Postoperative Outcome in Patients With Crohn's Disease Undergoing Right Hemicolectomy or Ileocaecal Resection An International Audit by ESCP and S-ECCO

2015 European Society of Coloproctology collaborating group

Abstract

Background: Patient and disease-related factors, as well as operation technique all have the potential to impact on postoperative outcome in Crohn's disease. The available evidence is based on small series and often displays conflicting results.

Aim: To investigate the effect of pre- and intra-operative risk factors on 30-day postoperative outcome in patients undergoing surgery for Crohn's disease.

Method: International prospective snapshot audit including consecutive patients undergoing right hemicolectomy or ileocaecal resection. This study analysed a subset of patients who underwent surgery for Crohn's disease. The primary outcome measure was the overall Clavien-Dindo postoperative complication rate. The key secondary outcomes were anastomotic leak, re-operation, surgical site infection and length of stay at hospital. Multivariable binary logistic regression analyses were used to produce odds ratios (OR) and 95% confidence intervals (CI).

Results: Three hundred and seventy five resections in 375 patients were included. The median age was 37 and 57.1% were female. In multivariate analyses, postoperative complications were associated with preoperative parenteral nutrition (OR 2.36 95% CI 1.10-4.97)], urgent/expedited surgical intervention (OR 2.00, 95% CI 1.13-3.55) and unplanned intraoperative adverse events (OR 2.30, 95% CI 1.20-4.45). The postoperative length of stay in hospital was prolonged in patients who received preoperative parenteral nutrition (OR 31, CI [1.08-1.61]) and those who had urgent/expedited operations (OR 1.21, CI [1.07-1.37]).

Conclusion: Preoperative parenteral nutritional support, urgent/expedited operation and unplanned intraoperative adverse events were associated with unfavourable postoperative outcome. Enhanced preoperative optimization and improved planning of operation pathways and timings may improve outcomes for patients.