EP.FRI.704
Emergency colorectal surgery outcomes within a non-specialist split site service – a retrospective cohort study

Rebecca Swan, Nicholas Ventham, Dimitrios Damaskos
Department of Clinical Surgery, Royal Infirmary of Edinburgh, Edinburgh, Scotland

Aims: Within this region, Upper GI and Colorectal subspecialties are located at separate hospitals. This study aims to determine outcomes of critically unwell patients undergoing emergency colorectal surgery off-site at the non-colorectal specialist centre.

Methods: An observational retrospective study of emergency colorectal laparotomies at a major acute teaching hospital (non-colorectal specialist centre) between January 2016 and August 2020 was performed. The primary outcome was 30-day mortality. Secondary outcomes included rate of primary anastomosis, complications and overall mortality. The NELA predicted mortality risk was obtained from notes or retrospectively calculated. Subgroup analysis of colorectal surgeon involvement was performed.

Results: One hundred and eighteen patients were included (median age 64 years, 55% female). The median NELA mortality score was 5.8% (IQR 1.9 – 14.7%). The 30-day mortality rate was 22% (26/118). The rate of primary anastomosis was 31%. Patients having an anastomosis had a lower median NELA score compared those patients who did not (1.6% vs. 7.85%). Forty five (38%) patients had Clavien-Dindo grade IV-V complication. Colorectal Surgeon involvement in the operation (23/118), was associated with a lower 30-day mortality (17.4% colorectal surgeon vs. 23.2% emergency general surgeon alone) albeit in patients with a lower median NELA score (4.5% vs. 6.7%) and a similar rate of primary anastomosis was achieved (31.6% vs. 30.9%).

Conclusions: The high mortality rate highlights a specific group of acutely unwell patients unfit for transfer to the subspecialist unit. Good outcomes were seen where a colorectal surgeon was involved, however a similar rate of primary anastomosis was demonstrated.