

AB115. Perioperative factors associated with postoperative morbidity after emergency laparotomy: a retrospective analysis in a university teaching hospital

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Background: Emergency laparotomy (EL) is a complex surgical procedure associated with increased morbidity and mortality. The UK National Emergency Laparotomy Audit (NELA) has identified variation in practice and patient outcomes, with 30-day mortality ranging 7–15%. NELA and other observational studies show correlation between pre-operative haemodynamic parameters (e.g., mean arterial pressures <80 mmHg for >10 min) and increased postoperative mortality. The association between intraoperative haemodynamic parameters and overall postoperative morbidity has not been evaluated in EL patients.

Methods: Digital and paper records of all patients

undergoing emergency laparotomy in tertiary referral hospital in 2018 were evaluated retrospectively. The comprehensive complications index (CCI) is a scale where higher scores indicate higher morbidity impact. We correlated a range of perioperative parameters with CCI, among patients who underwent EL during 2018.

Results: The total number of patients included was 96. Mean age was 64 years (SD +/-16), 44% being surgical category I emergency. Median (25–75%) CCI was 27 [9–45], and 30-day mortality was 11.7%. While a number of intraoperative parameters correlated with CCI on univariate analysis, multivariable linear regression indicted only ASA status (P=0.005) and unplanned escalation to postoperative intensive care (P=0.03) were independently associated with CCI.

Conclusions: This retrospective analysis of n=96 patients undergoing emergency laparotomy in a university teaching hospital has shown that ASA status and unplanned escalation to Intensive Care Unit, but not intraoperative haemodynamic parameters, were independently associated with increased postoperative morbidity. This warrants confirmation in a larger scale observational study.

Keywords: Emergency laparotomy; complications; morbidity; outcomes

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