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Original research article

A STUDY ON CLINICAL PROFILE OF PATIENTS WHO UNDERWENT EMERGENCY LAPAROTOMIES AT TERTIARY CARE HOSPITAL

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Abstract

Operative mortality is an important and objective measure of outcome. Monitoring of outcome is an increasingly important part of the governance of surgical activity. Both the purchasers of health care and individual patients value information concerning mortality and morbidity rates of surgical procedures. Data was collected prospectively on a proforma prepared for the study from the patients undergoing emergency laparotomy. All such patients would have their physiological score recorded on admission. An operative severity score was calculated based on findings recorded by the operating surgeon on the proforma. There were 75 (50%) patients with complications observed during hospital stay. The major ones being chest infections (41 patients, 27.33%), wound infections (37 patients, 24.66%), post operative fever (42 patients, 28.00%) wound dehiscence (31 patients, 20.66%), septicemia (14 patients, 9.33%) and anastomotic leak producing faecal fistula in (14 patients, 9.33%).

Keywords: Emergency laparotomy, operative mortality, wound dehiscence

Introduction

The outcome of surgical intervention, whether death of uncomplicated survival, complications, or long-term morbidity is not solely dependent on the abilities of surgeon in isolation. The patients physiological status, the disease that requires surgical correction, severity of disease, the nature of the operation and the pre-operative and post-operative support services have a major effect on the ultimate outcome. It is evident to surgeons that raw mortality and morbidity rates do little to explain these differences, and that the use of such statistics is at best inaccurate and misleading [1].

To provide comparative audit between different populations, measures of outcome must include methods to accommodate for differences in case mix [2].

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Operative mortality is an important and objective measure of outcome [2]. Monitoring of outcome is an increasingly important part of the governance of surgical activity. Both the purchasers of health care and individual patients value information concerning mortality and morbidity rates of surgical procedures [3]. Thus, there has been a search for accurate risk scoring systems that can be used to compare patient outcomes according to different units and hospitals [4].

Methodology

Data was collected prospectively on a proforma prepared for the study from the patients undergoing emergency laparotomy. All such patients would have their physiological score recorded on admission. An operative severity score was calculated based on findings recorded by the operating surgeon on the proforma.

P-POSSUM equation for mortality

Log R/1-R = - 9.065 + (0.1692 x physiological score) + (0.1550 x operative severity score).

R = risk of mortality.

Postoperative morbidity and death in the hospital was recorded in accordance with definitions described previously . A total of 150 cases were included in the study.

Study Period: Sep 2023 to Dec 2023

Inclusion criteria

Patients undergoing emergency laparotomy.

Exclusion criteria

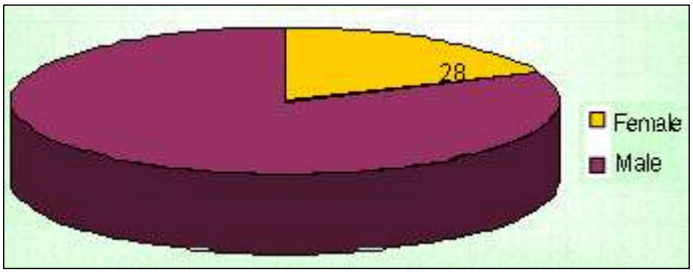
Age of patients < 12 yrs.

This study got ethical Clarence from Institutional Ethical Committee

Results

A total of one hundred fifty emergency laparotomies were performed between November 2011 to May 2013.

28 patients were female and 122 were male patients.



Graph 1: Graphical representation of sex incidence undergoing emergency laparotomy

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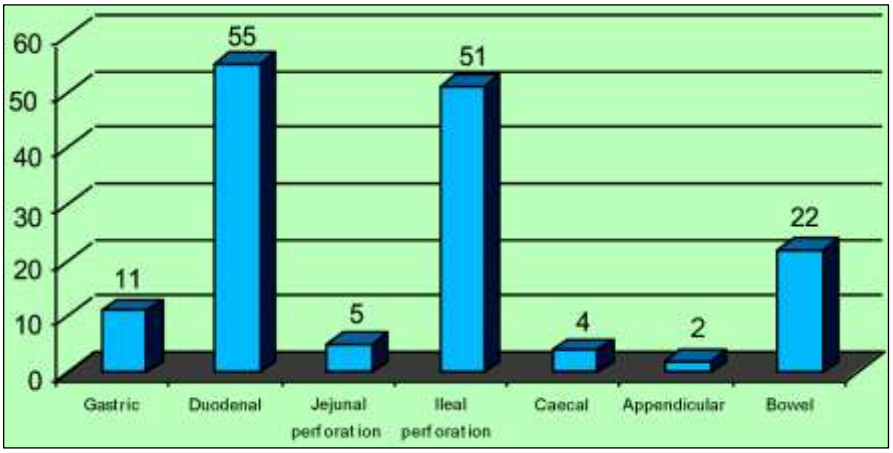
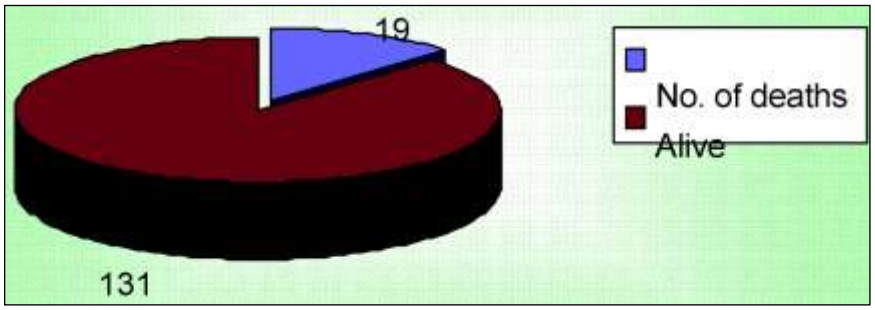
A total 166 procedures were done on 150 patients. The indications for emergency laparotomy were:

i) Gastric perforation (11 patients).
ii) Duodenal perforation (55 patients).
iii) Jejunal perforation (5 patients).
iv) Ileal perforation (51 patients).
v) Caecal perforation (4 patients).
vi) Appendicular pathology (2 patients).
vii) Bowel obstruction (22 patients).

Nineteen deaths occurred in the post-operative period in the hospital, with crude mortality of 12.66%.



Graph 2: Graphical representation of indications of emergency laparotomy



Graph 3: Observed mortality of emergency laparotomy

Table 1: Complications

Complications	No. of patients	Percentage (%)
Chest infection	41	27.33
Post operative fever	42	28.00
Wound infection	37	24.66
Wound dehiscence	31	20.66
Septicemia	14	9.33
Anastomotic leak	14	9.33

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There were 75 (50%) patients with complications observed during hospital stay. The major ones being chest infections (41 patients, 27.33%), wound infections (37 patients, 24.66%), post operative fever (42 patients, 28.00%) wound dehiscence (31 patients, 20.66%), septicemia (14 patients, 9.33%) and anastomotic leak producing faecal fistula in (14 patients, 9.33%).

Discussion

Morbidity and mortality continue to be of importance as the quality of care is being judged by morbidity and mortality rates [5]. In a set up like ours, where the patients undergo emergency laparotomy for diverse etiologies, patients' nutritional status, comorbid conditions, availability of limited resources, post-operative supportive care plays important role in the quality of care. So, it is not just enough to measure quality of care with morbidity and mortality rates [6].

Conclusion

There were 75 (50%) patients with complications observed during hospital stay. The major ones being chest infections (41 patients, 27.33%), wound infections (37 patients, 24.66%), post operative fever (42 patients, 28.00%) wound dehiscence (31 patients, 20.66%), septicemia (14 patients, 9.33%) and anastomotic leak producing faecal fistula in (14 patients, 9.33%).

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