



A CLINICAL STUDY ON NON TRAUMATIC ABDOMINAL SURGICAL EMERGENCIES

Surgery

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ABSTRACT

Aim: To determine the common causes of non traumatic abdominal surgical emergencies presenting in our hospital and its incidence, presentation and management

Methodology: A study of 252 inpatients with non traumatic acute abdomen admitted in surgical ward, Meenakshi Medical College and Research Institute. Based on clinical diagnosis, Investigation patients were opted for emergency surgery. The study period was between June 2017 to May 2018

Results: The most common cause in this study was acute appendicitis in 58.73% of patients. 90.30% of acute appendicitis patients were managed surgically. Intestinal obstruction was seen in 38 patients of which 76.32% were managed surgically. All patients diagnosed with hollow viscous perforation were operated

Conclusion: Acute non traumatic abdominal emergencies admitted in the hospital requires the clinicians to consider multiple diagnoses, especially that require immediate intervention to limit mortality

KEYWORDS

Abdominal pain, Non traumatic, Kanchipuram

INTRODUCTION

Acute abdominal pain comprises the majority of emergency admissions in surgical wards. It makes up most of the work load a general surgeon deals in emergency and also provides challenges in diagnosis and its management. Arriving to a precise diagnosis has become the most essential part which may decide the survival of the patient. The progression of the disease depends on pathological process involved, which may resolve spontaneously with or without treatment and at other time may progress to a severe condition leading to death. A unhurried surgeon's clear history and a precise physical examination remains the cornerstone for ascertaining the diagnosis, which can be confirmed by laboratory data and radiographic studies if and when necessary. Periodic reexamination gives a picture on the progression of the disease and helps in avoiding unnecessary surgical intervention. The morbidity and mortality of patients presenting with acute abdomen has decreased markedly due to the combination of improved diagnostic techniques, anaesthesia, pre- and post-operative care. The main aim of this study is to determine the common causes of non traumatic abdominal surgical emergencies presenting in our hospital and its incidence, presentation and management

MATERIALS AND METHODS:

A study of 252 inpatients admitted with non traumatic acute abdomen in surgical ward, Meenakshi Medical College Hospital and Research Institute. Period of Study was from June 2017 to May 2018. Based on clinical diagnosis, Investigation patients were opted for emergency surgery

Exclusion criteria

- Patients below 14 years of age
- Traumatic cases
- Obstetric and gynaecological emergencies

Detailed history and clinical examination of all patients were obtained. Routine investigations were also documented. Findings of ultrasonography and CT abdomen pelvis were noted. Operative findings and diagnosis were recorded. Final outcome was evaluated.

Statistical analysis

Statistical analysis was done using SPSS (statistical package for social science), version 21

RESULTS

A total of 252 patients were included in this study with non traumatic acute abdomen in surgical ward, Meenakshi Medical College Hospital and Research Institute. Table 1 shows that acute appendicitis was the most common cause for non traumatic acute abdomen which accounted for 148(58.73%) of total patients. The other causes for non

traumatic acute abdomen were acute intestinal obstruction seen in 38(15.08%), Acute cholecystitis seen in 26(10.32%) patients, Acute pancreatitis in 21(8.33%) patients and hollow viscous perforation in 19(7.54%) patients. Table 2 shows the management of non traumatic abdominal surgical emergencies. It shows preference for operative and conservative management in each cause. In acute appendicitis 138(93.24%) were managed surgically and 10(6.76%) were managed conservatively. Among patients with acute intestinal obstruction 29(76.32%) were operated. The surgically management was preferred in 21(80.76%) acute cholecystitis patients. All hollow viscous perforation patients were managed surgically and all acute pancreatitis patients were managed conservatively.

Table 1. Causes of non traumatic abdominal surgical emergencies

Diagnosis	Number of patients(n)	Percentage
Acute appendicitis	148	58.73%
Acute intestinal obstruction	38	15.08%
Acute cholecystitis	26	10.32%
Acute pancreatitis	21	8.33%
Hollow viscous perforation	19	7.54%
	252	100%

Table 2. Management of non traumatic abdominal surgical emergencies

Diagnosis	Operative	Percentage	Conservative	Percentage
Acute appendicitis	138	93.24%	10	6.76%
Acute intestinal obstruction	29	76.32%	9	23.68%
Acute cholecystitis	21	80.76%	5	19.24%
Acute pancreatitis	0	0%	21	100%
Hollow viscous perforation	19	100%	0	0%

DISCUSSION

The most common cause of non traumatic abdominal surgical emergency in this study was acute appendicitis 58.73% followed by acute intestinal obstruction 15.08%, acute cholecystitis 10.32%, acute pancreatitis 8.33% and hollow viscous perforation 7.54%. The most preferred line of management was operative procedure in 86.11% of total patients.

Among acute appendicitis patients, 93.24% were managed surgically. The incidence was high among patients in the 2nd decade of life and

more common among females. Most patients presented with right lower quadrant abdominal pain and fever. Inflamed appendix was the common intra operative finding. Oschner regimen was used to treat patients who were managed conservatively. Interval appendicectomy was done in these patients at a later time. There was no mortality among patients with acute appendicitis.

In patients presenting with acute intestinal obstruction 76.32% were treated surgically. More common in patients above 5th decade of life and in males. Common presentation was abdomen distension and pain. Adhesions was the most common intraoperative finding followed by obstructed hernia. Resection and anastomosis was done in 5 patients and diversion colostomy done in 3 patients. 4 patients succumbed to death.

Acute cholecystitis patients were managed surgically in 80.76% of patients. More commonly seen in the 3rd decade of life and in females. Patients mostly presented with right upper quadrant abdominal pain and fever. Laparoscopic cholecystectomy was the procedure commonly used. Calculous was the commonest finding in these patients. No mortality was seen among these patients

All hollow viscus perforation patients were managed surgically. More common in 3rd and 4th decade of life and very high in males. Most of the patients presented in shock. Duodenal perforation was commonest intra operative finding. Emergency laparotomy was done in all patients. Primary closure with omental patch was the most preferred procedure. 5 patients expired due to post operative complications.

All acute pancreatitis patients were managed conservatively. More common in 2nd and 3rd decade of life. Alcohol was the major cause for pancreatitis. 2 patients expired due to complications of pancreatitis. The total mortality rate in this study was 4.36%

CONCLUSION

Acute non traumatic abdominal emergencies admitted in the hospital requires the clinicians to consider multiple diagnoses, especially that require immediate intervention to limit mortality

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