

A Study of Various Associated Factors Surgical Intervention in the Patients of Acute Abdomen at Tertiary Health Care Center

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Abstract: Introduction: Abdominal pain is the most common presenting condition requiring quick diagnosis and treatment. Aims and Objectives: To study of various associated factors surgical intervention in the patients of Acute abdomen at Tertiary health care center. Methodology: The present study was conducted in the department general surgery of a tertiary health care center period of January 2002 to December 2003. It consisted of 107 cases of acute abdomen, with regard to their clinical presentation and operative findings. Only those patients, who were operated upon, were included in our study. Result: The majority of the patients were in the age group of 11-20 and 51-60 i.e. 20.56%, followed by 21-30 were 17.76%, 41-50 were 12.15%, 61-70 were 10.28%, 31-40 were 7.48%, 0-10, Were 6.54% respectively. The majority of the patients were Male i.e. 71.03% and in Females was 28.97%. Overall the most common associated conditions were Acute appendicitis-38.31% followed by Peritonitis-34.58%, Intestinal obstruction-21.50%, Acute pancreatitis, NSAP, Ruptured Ectopic in 1.87%. Conclusion: It can be concluded from our study that the majority of the patients were The majority of the patients were in the age group of 11-20 and 51-60, Age group Overall the most common associated conditions were Acute appendicitis, followed by Peritonitis, Intestinal obstruction, Acute pancreatitis, NSAP, Ruptured Ectopic.

Keywords: Acute abdomen, Acute appendicitis, Peritonitis, Intestinal obstruction Acute pancreatitis

1. Introduction

Abdominal pain is the most common presenting condition requiring quick diagnosis and treatment. However when confronted with a patient suffering from severe abdominal pain, it is sometimes difficult to be certain as to the exact intra-abdominal lesion, which has given rise to the symptoms, unless one opens the "Lid" of abdomen by an exploratory laparotomy. Acute abdomen has been defined as "any abdominal pain of less than one week duration requiring emergency admission to hospital with prompt attention, surgical or medical".

The patient with acute abdominal pain presents with symptomatology, which itself in first instance is not diagnostic of any pathology. A detailed clinical examination with a study of symptoms and signs presented along with previous experience enables us to arrive at a clinical diagnosis with certain degree of accuracy. In spite of this, many a times the operative findings are at variance with clinical diagnosis.

Acute abdominal pain is one of the most common presenting complaints at emergency of general surgery department and due to its varied etiology it poses significant diagnostic challenges for emergency surgeons¹. At presentation, it is usually of sudden onset and associated with features like nausea, anorexia, vomiting, tachycardia etc. The etiology and presentation also varies according to demographic patterns, age distributions and local availability of health care facilities².

2. Methodology

The present study was conducted in the department general surgery of a tertiary health care center period of January 2002 to December 2003. It consisted of 107 cases of acute abdomen, with regard to their clinical presentation and operative findings. Only those patients, who were operated upon, were included in our study, the patients who on admission were thought to have a surgical cause for pain and later on, after investigation and observation, did not merit immediate surgical intervention, were excluded from the study. Patients were thoroughly evaluated and examined and detailed clinical history was taken and all necessary information was filled in the proforma, which is attached herewith. On admission pre-operative investigations such as hemoglobin, W.B.C count, blood sugar, blood urea, serum electrolyte, ECG, X-ray chest and x-ray abdomen in erect posture were done. The decision to operate upon was made by senior surgeon present at the time and was based on the pattern of clinical presentation and X-ray findings. General anesthesia was used in most of cases except in few cases were spinal/epidural was used. When the cause was unknown or suspected to be in upper abdomen, the right upper para-median incision was used. In cases of doubt, a lower para-median or midline incision was considered.

3. Results

Table 1: Age wise distribution of the patients

Final diagnosis	0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80
Acute appendicitis	4	17	11	2	3	3	-	1
Peritonitis	1	2	4	3	8	12	5	2
Intestinal obstruction	2	1	3	2	2	6	5	2
Acute pancreatitis	-	1	-	-	-	-	1	-
NSAP	-	-	1	-	-	1	-	-
Ruptured ectopic	-	1	-	1	-	-	-	-
Total	7	22	19	8	13	22	11	5
Percentage (%)	6.54	20.56	17.76	7.48	12.15	20.56	10.28	4.67

The majority of the patients were in the age group of 11-20 and 51-60 i.e.20.56% , followed by 21-30 were 17.76%, 41-50 were 12.15%, 61-70 were 10.28%, 31-40 were 7.48%, 0-10. Were 6.54% respectively.

Table 2: Sex wise distribution of the patients

Final diagnosis	Male	Female
Acute appendicitis	32	9
Peritonitis	30	7
Intestinal obstruction	13	10
Acute pancreatitis	1	1
NSAP	0	2
Ruptured ectopic	0	2
Total	76	31
Percentage (%)	71.03	28.97

The majority of the patients were Male i.e.71.03 % and in Females was 28.97%.

Table 3: Distribution as per the associated conditions of acute abdomen

Final diagnosis	No. of cases	Percentage
Acute appendicitis	41	38.31%
Peritonitis	37	34.58%
Intestinal obstruction	23	21.50%
Acute pancreatitis	2	1.87%
NSAP	2	1.87%
Ruptured Ectopic	2	1.87%
Total	107	100.00

Overall the most common associated conditions were Acute appendicitis-38.31% followed by Peritonitis-34.58%, Intestinal obstruction-21.50%, Acute pancreatitis, NSAP, Ruptured Ectopic in 1.87%

4. Discussion

Abdominal pain is one of the most common emergencies presenting to emergency department (ED). ³ Approximately 10% of presentations at the emergency department are because of acute abdominal pain. ⁴ It poses a diagnostic challenge for the emergency physicians as the causes are numerous, ranging from benign to life threatening conditions. Causes include gastrointestinal, urological, and gynaecological among others. ⁵ Although most abdominal pain is benign, as many as 10% of patients in the emergency department setting and a lesser percentage in the outpatient setting have a severe or life-threatening cause or require surgery. ³ of patients usually remained with a nonspecific cause but now with latest radiological imaging advances that number has reduced. ⁶ The elderly patients have atypical presentations with longer duration of pain at presentation.

⁷ Acute abdominal complications are perceived as relatively common events in the medical intensive care unit (MICU). They have been regarded as a “silent offender” because of the absence of typical clinical signs and symptoms ¹¹

Causes of acute abdominal pain include both medical and surgical. ⁸ In an observational study by Tariq et al. from Pakistan the most common cause of acute abdomen was acute appendicitis followed by acute pancreatitis and duodenal ulcer. ⁹ A study done in Ghana, Africa, also reported acute appendicitis followed by typhoid fever with ileal perforation and acute intestinal obstruction as most common causes of acute abdominal pain. ¹⁰

In our study we have found that The majority of the patients were in the age group of 11-20 and 51-60 i.e.20.56% , followed by 21-30 were 17.76%, 41-50 were 12.15%, 61-70 were 10.28%, 31-40 were 7.48%, 0-10, Were 6.54% respectively. The majority of the patients were Male i.e.71.03 % and in Females was 28.97%. Overall the most common associated conditions were Acute appendicitis-38.31% followed by Peritonitis-34.58%, Intestinal obstruction-21.50%, Acute pancreatitis, NSAP, Ruptured Ectopic in 1.87 %.

These findings are similar to Biswajit Barai¹² and et al they found Most common cause was found to be acute appendicitis (16.3%) followed by acute pancreatitis (11.92%), acute cholecystitis (9.60%) and renal colic (7.49 %) etc. but not in confirmation with the Ritesh Gajjar¹³ they found The most common reasons for acute abdominal pain were ureteric colic (22%), acute gastroenteritis (11%), acid peptic disease (11%), UTI (7%), hollow viscus perforation (08%) and acute appendicitis (07%).

5. Conclusion

It can be concluded from our study that the majority of the patients were The majority of the patients were in the age group of 11-20 and 51-60 , Age group Overall the most common associated conditions were Acute appendicitis, followed by Peritonitis , Intestinal obstruction, Acute pancreatitis, NSAP, Ruptured Ectopic.

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