

To Study the Clinical Features of Various Causes of Acute Abdomen Patients at M.G.Hospital Bhilwara Rajasthan

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Abstract

Background – The acute abdominal pain is defined as a pain that arises suddenly and is of less than a week’s and in most cases less than 48 hours’ duration.

Methods- Hospital prospective based study conducted in Department of General Surgery, M.G.Hospital, Bhilwara, Rajasthan. 50 patients reporting to the Surgery department within study duration and eligible as per inclusion criteria were included in the study.

Results- In our study acute appendicitis is the most common cause of acute abdomen comprising of 50% of cases followed by intestinal obstruction 14% cases.

Conclusion- Acute abdomen is one of the most common presentations in emergency department. The common causes are acute appendicitis and intestinal obstructions followed by traumatic causes.

Keywords- Perforation, Peritonitis, Traumatic.

Introduction

Acute abdominal pain is one of the most common presenting complaints at emergency of general surgery department and due to its varied aetiology it poses significant diagnostic challenges for surgeons ¹.

Acute abdomen is a term used to encompass a spectrum of surgical, medical and gynaecological conditions ranging from trivial to life threatening conditions, which require hospital admission, investigations and treatment.

The acute abdominal pain is defined as a pain that arises suddenly and is of less than a week’s and in most cases less than 48 hours’ duration². The term acute abdomen

defines a graver presentation of abdominal pain, accompanied by guarding and muscular rigidity, which essentially describes the clinical picture of peritonitis and usually calls for an emergency operation³. This led to the common misconception that the acute abdomen is synonymous with the surgical abdomen. However, not all cases of acute abdomen are best treated with surgery. In literature as well as in clinical practice the borders between the acute abdominal pain and acute abdomen overlap and are used interchangeably⁴.

Material and Methods

Study design

Cross sectional Hospital based study.

Study place:

Department of Surgery, M.G.Hospital Bhilwara.

Study population

All patients who present with acute abdomen

Sampling Method

Convenience sampling

Inclusion Criteria

All patients who present with acute abdomen including blunt trauma to abdomen and those who give consent are included for study.

Exclusion Criteria

1. All pregnant and gynaecological cases
2. Patients with post operative abdominal scar and postoperative peritonitis
3. All patients with renal or ureteric calculi.
4. All patients with diagnosed coagulation disorders.

5. Pediatric age group (<15 years)

Data Collection

Data were collected from the patients by their clinical history, clinical examination with appropriate investigations on those patients who were admitted. Accurate history was taken with respect to the Pain - Onset, type, site, progress, aggravating and relieving factors.

Data Analysis

To collect required information from eligible patients a pre-structured pre-tested Proforma was used. For data analysis Statistical software SPSS was used and data were analyzed with the help of frequencies, figures, proportions, measures of central tendency, appropriate statistical test.

Observations

Table 1. Distribution of Cases According to Final Diagnosis

Causes	No. of Cases	Percentage
Acute Appendicitis	25	50.0
Acute Cholecystitis	5	10.0
Acute pancreatitis	4	8.0
Appendicular Lump	3	6.0
Appendicular Perforation	2	1.0
BTA	4	8.0
Intestinal Obstruction	7	14.0
Total	50	100.00

In our study acute appendicitis is the most common cause of acute abdomen comprising of 50% of cases.

The traumatic cases comprised of 8% of the cases of patients presenting with acute abdomen.

Table 2. Distribution of Cases According to symptoms

Symptoms	No. of Cases	Percentage
Pain abdomen	50	100.00
Vomiting	43	86.00
Fever	27	54.00
Diarrhea	12	24.00

In our study 100.00% patients present with pain abdomen and 86.00% patients present with vomiting.

Table 3. Distribution of Cases According to sign

Sign	No. of Cases	Percentage
RIF Tenderness	45	90.00
Rebound tenderness	33	66.00
Muscle guarding	6	12.00

In our study 90.00% patients present with RIF Tenderness and 66.00% patients present with Rebound tenderness .

Discussion

The present study was conducted in the Department of Surgery, M.G.hospitals, Bhilwara . Total 50 cases were studied in duration of 1 year.

In the present study the most common cause of acute abdomen was acute appendicitis accounting for 50% of the overall cases was seen in this study.

Acute appendicitis is an important cause of acute abdominal pain. The incidence of appendicitis in all age groups is 7%. The incidence of appendicitis in women is 6.7%. Appendicitis is most commonly seen in subjects aged 10-30 years⁵ . In present study maximum incidence of appendix is seen in the age group between 21-30 years. The median age for appendicitis in present study was 30.8 years⁸.

The main symptoms of acute appendicitis are frequently periumbilical pain preceded by anorexia and nausea. Vomiting is generally seen later. The pain generally

switches to the right lower abdominal quadrant 8 h after the initial pain⁷. Although the clinical presentation of periumbilical pain migrating to the right lower abdominal quadrant is classically associated with acute appendicitis, the presentation is rarely typical and the diagnosis cannot always be based on medical history and physical examination alone. Classical clinical findings of appendicitis are observed in only 60% of patients with acute appendicitis, whereas 20%-33% display atypical clinical and laboratory findings.

Intestinal obstruction is the second most common cause of acute abdomen in present study. It is defined as obstruction in forward propulsion of the contents of the intestine either due to dynamic, adynamic or pseudoobstruction. It is predisposed by varying underlying anomalies and diseases, which are difficult to define preoperatively. Intestinal obstruction of either the small or large bowel continues to be a major cause of morbidity and mortality. Mode of presentation is same, but underlying cause may vary. In earlier part of the century mortality and morbidity was very high. Now with better understanding of pathophysiology, improvement in radiological techniques of diagnosis and high degree of refinement in correction of fluid and electrolyte imbalance, introduction of antibiotics for effective bacteriological control, introduction of techniques in gastrointestinal decompression, new surgical principles, like on table lavage and resection and primary anastomosis replacing staged procedures and number of days in hospital stay, improvement in field of anaesthesia, has all contributed to lower the morbidity and mortality. In our clinical study incidence of intestinal obstruction was 14% of total study group. It is compared with other studies i.e., in Naveen N et al.⁸ series incidence was 3% of total study group.

Acute Cholecystitis is the third most common cause for patients presenting with acute abdomina pain in present study. It is the inflammation of the gallbladder that occurs most commonly because of an obstruction of the cystic duct by gallstones arising from the gallbladder (cholelithiasis). Out of 50 cases in our clinical study incidence of acute cholecystitis is 10%. In study conducted by Biswajit barai et al.⁹ (2016) incidence was 13%, which is comparable to present study.

Conclusions

Acute abdomen is one of the most common presentations in emergency department. The common causes are acute appendicitis and intestinal obstructions followed by traumatic causes.

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