



STUDY ON NON TRAUMATIC ABDOMINAL EMERGENCIES

General Surgery

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ABSTRACT

Abdominal pain is one of the most common reasons for visiting the emergency department. In this study, we aimed to evaluate the trends in NON TRAUMATIC ABDOMINAL EMERGENCIES presenting in a tertiary care center and the need for surgery in these cases.

200 patients with acute abdominal pain presenting to the emergency department were included in the study. Patients with a history of trauma were excluded from the study.

Out of 200 cases, 150 cases needed surgical intervention. 50 cases were managed conservatively. Out of 150 cases first most common is ACUTE APPENDICITIS, followed by HOLLOW VISCUS PERFORATIONS.

Acute non-traumatic abdominal emergencies admitted in the hospital constitute a major chunk of surgical patients, the majority requiring operative management with limited mortality.

KEYWORDS

Non-traumatic, abdominal pain, surgical emergencies.

INTRODUCTION

Abdominal pain is one of the most common reasons for visiting the emergency department^(1,2).

The natural history of acute abdomen depends on the pathological process involved, which in some instances may resolve spontaneously with or without treatment and at other times, may progress to generalized peritonitis and death. Causes include gastrointestinal, urological, gynecological, and other non-specific causes.

The history and physical examination remain the cornerstone for the diagnosis, which is confirmed by laboratory data and by radiographic studies.

If this information is inadequate to establish a diagnosis, periodic re-examination helps to document the progression of the disease and often avoids unnecessary surgical intervention^(3,4).

Today the combination of improved diagnostic procedures, antibiotics, and better anesthesia and preoperative and postoperative patient care has led to a decrease in morbidity and mortality of patients with acute abdomen.

MATERIALS AND METHODS

SOURCE OF DATA:

A total of 200 patients with acute abdominal pain presenting to the emergency department of ALLURI SITARAMA RAJU ACADEMY OF MEDICAL SCIENCES, ELURU, INDIA, From November 2018 to November 2019 (1 year).

METHODS OF DATA COLLECTION :

1. A total of 200 patients admitted in the emergency surgical ward as acute abdomen at ALLURI SITARAMA RAJU ACADEMY OF MEDICAL SCIENCES, ELURU, INDIA, from November 2018 to November 2019 (1 year).
2. Patients with a history of trauma were excluded from the study.
3. Patients with non – gastrointestinal etiology were also included in this study.

On admission, a detailed inquiry into the history and a systematic and thorough clinical examination were conducted, and the possible necessary investigations were done for all the patients.

A methodical diagnosis was arrived and treated accordingly.

RESULTS

The study was conducted on the 200 patients admitted in the emergency surgical ward as an acute abdomen at ALLURI SITARAMA RAJU ACADEMY OF MEDICAL SCIENCES, ELURU, INDIA.

Out of these patients, 150 patients needed emergency surgical intervention. The remaining 50 patients were managed conservatively. These included ureteric colic, sub-acute adhesive intestinal obstruction, pelvic inflammatory disease, and acute pancreatitis.

Table – 1 : Total Cases Studied :

| DIAGNOSIS | TOTAL NO | PERCENTAGE |
|-------------------------|----------|------------|
| Appendicitis | 90 | 60 |
| Perforations | 21 | 14 |
| Obstructed hernias | 18 | 12 |
| Intestinal obstructions | 16 | 10.6 |
| Other cases | 5 | 3.4 |
| Total | 150 | 100.0 |

Table-1 shows that the most common acute abdomen in our hospital is acute appendicitis (60%), followed by hollow viscus perforations (14%).

ACUTE APPENDICITIS:

A total of 90 cases were operated, which include uncomplicated appendicitis and appendicular abscess. Their incidence is 4 cases (4.4%) in first decade of life, 35 cases (38.8%) in the second decade, 37 cases (41.11%) in third decade, 10 cases (11.11%) in the fourth decade, 4 cases (4.4%) in the fifth decade. Most of the patients were operated by laparoscopic appendectomy, and few were operated by open appendectomy. For patients with abscess, a drain was placed.

HOLLOW VISCUS PERFORATION:

In the present study, out of 21 cases with perforation 16 cases (76.1%) were Duodenal perforations, 2 cases (9.52%) were of Gastric perforations, and 3 cases (14.28%) were ileal perforations. In our series, most of the cases were of Duodenal perforations. Graham's patch was performed.

The incidence of the duodenal perforations was 16 cases in this

3cases(18.75%) were in 21-30yrs, 3cases(18.75%) were in 31-40yrs, 5cases(31.25%) in both 41-50yrs, and >50yrs age groups.

The study shows that there was a maximum incidence in the 41-50 age group (31.25%) and >50 age (31.25%). The younger age group can probably be attributed to the stressful lifestyle, and NSAID use all our patients belonging to the low socio-economic group.

OBSTRUCTED HERNIAS:

In the present study, out of 18cases presented with obstructed hernias 16cases(88.8%) were due to inguinal hernias being obstructed of these 3 are sliding hernias, 2 are both direct and indirect hernias where indirect hernia sac got obstructed. Other 2cases were Incisional and Umbilical hernias.

SMALL BOWEL OBSTRUCTION:

In the present study, out of 12cases presented with small bowel obstruction 5case(41.6%) were due to adhesions, 2cases(16.6%) were due to strictures, 1case(8.3%) due to Internal herniation, 4cases(33.3%) due to bands. In the present study, postoperative adhesions were the most prevalent cause of intestinal obstruction.

LARGE BOWEL OBSTRUCTION :

In the present study, out of 4cases of Large bowel obstruction 2cases(50%) were diagnosed as Colonic growth, other 2cases were Sigmoid volvulus, and another one is Recto sigmoid growth. Colonic growths were common in our series. There were more male patients of age > 50yrs.

For adhesions, adhesiolysis was done. For obstructions, resection and anastomosis was performed.

OTHERS:

Others were the 2 cases of twisted ovarian cysts, 1 case of ectopic pregnancy, and 2 cases of ruptured amoebic liver abscess.

DISCUSSION

Acute abdominal pain is one of the most frequent complaint of patients presenting to the Emergency Department. All patients with abdominal pain do not require extensive diagnostic tests. Sometimes adequate history and physical evaluation alone is sufficient to accurately diagnose the condition and treat accordingly.

Conditions causing acute abdominal pain may vary, from conditions needing immediate intervention to relatively mild presentations requiring careful observation to avoid over investigation and unnecessary interventions.

Patients may have acute exacerbations of chronic problems (e.g., peptic ulcer disease, pancreatitis, and inflammatory bowel disease), acute surgical abdomen (e.g., appendicitis, intestinal perforation, and acute volvulus) or non-surgical abdominal emergencies (e.g., ureteric colic, biliary colic, and acute gastroenteritis).

Most common cause of acute abdomen in our study is appendicitis (60%) followed by hollow viscus perforations (14%), obstructed hernias (12%), intestinal obstruction (10.6%), and others (3.4%), which was similar to S. Vijayalakshmi et al.,⁶⁾ in which appendicitis 66.41%, perforations 11.94%, followed by obstructed / irreducible hernias 7.46%.

The age incidence of appendicitis in this study shows a definite shift to patients between 15 and 25, accounting for almost 30% of all the cases. There was a definite male preponderance in the cases studied.

Duodenal perforation was the commonest cause of hollow viscus perforations. Ileal perforation was the next commonest cause of perforations, almost all being due to typhoid. Inguinal hernias were the commonest hernias to become obstructed.

Small bowel obstruction seems to be the disease of the young, as shown by our series. There was almost equal incidence among both sexes. Adhesions were the second commonest cause of intestinal obstruction, only after obstructed inguinal hernias.

All abdominal emergencies did not require emergency surgical intervention. In our study, 50 of the patients were treated conservatively.

CONCLUSION

Acute non-traumatic abdominal emergencies admitted in the hospital constitute a major chunk of surgical patients, the majority requiring operative management with limited mortality.

REFERENCES

1. Naveen K, Sareesh NN, et al. Appendicitis and Appendicectomy: A retrospective study in South Indian population. *Journal of Surgical Academia*, 2013; 3(2): 10-13
2. Velappan DP, et al. Clinical study and management of hollow viscus perforation on abdomen. *International Surgery Journal*, 2017; 4(5).
3. Bailey and Love's Short Practice of Surgery, 26th edition, Hodder Arnold, 2013.
4. Maingot, *Abdominal Operations*. 12th edition, Mc-Graw Hill, 2012.
5. Hugh A. F. Dudley, *Hamilton Bailey's Emergency Surgery*, 13th edition, John Wright, 1995.
6. S. Vijayalakshmi et al., Retrospective study analyzing the data on non-traumatic abdominal emergency surgeries done tertiary care hospital, Chennai. *IAIM*, 2019; 6(1): 65-69.
7. Sabiston DC, Townsend CM. *Acute abdomen*. Sabiston Textbook of Surgery, 19th edition; Philadelphia, PA: Elsevier Saunders; 2012:1317.