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Original article:

Study of management of acute pain in abdomen: Observational study

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Abstract

Introduction: Abdominal pain is the most common cause for the visit to the emergency department (ED), accounting for 8 million (7%) of the 119 million ED visits in 2006. (1) Obviously, anyone practicing emergency medicine (EM) or surgery must be skilled in the assessment of abdominal pain.

Material and methods: The present research work was carried out in our Department of surgery in our YCM Hospital, Pune hospital in last six months. This was observational study including 50 patients admitted in our hospital with complaints of acute pain in abdomen. The patients admitted in last one year were included in study except the patients that were not take regular follow up – were excluded from present study.

Results: In our present study, out of 50 patients male dominance (62 %) was noted. Mean age was noted 42.22 years with SD 7.21 years. The 82 % patients admitted were in as emergency with complaints of acute pain in abdomen. Out of 50 cases only 4 patients were send for CTscan of them in 2 patients we found positive correlations. USG was done in 14 cases of them there was found positive correlations in 9patients.

Conclusion: Acute abdomen is often a surgical emergency and a challenge to any surgeon. Rigorous approach to diagnose is mandatory. Acute appendicitis was the most common cause of abdominal surgical emergency.

Introduction:

Abdominal pain is the most common cause for the visit to the emergency department (ED), accounting for 8 million (7%) of the 119 million ED visits in 2006. (1) Obviously, anyone practicing emergency medicine (EM) or surgery must be skilled in the assessment of abdominal pain. Although a common presentation, abdominal pain must be approached in a serious manner, as it is often a symptom of serious disease and misdiagnosis may occur. Abdominal pain is the presenting issue in a high percentage of medicolegal actions against both general and pediatric EM physicians as well as surgeons. (2) The modern physician should be humbled by the fact that, despite diagnostic and therapeutic advances (computed tomography [CT], ultrasonography, and laparoscopy), the misdiagnosis rate of the most common surgical emergency, acute appendicitis, has changed little over time. (3) With this view we planned present work to study of management of acute pain in abdomen.

Material and methods:

The present research work was carried out in our Department of surgery in our YCM Hospital, in last six months. This was observational study including 50 patients admitted in our hospital with complaints of acute pain in abdomen.

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We excluded patients with operated with other complications. Patients were excluded with not taking follow up in study. Patients presented with acute abdomen of traumatic origin and Pregnant women and children presented with acute abdomen were also excluded from our study.

The samples were collected using randomly. All data was tabulated in Excel sheet and analyzed.

In this study, Pre-operative detailed history and thorough physical examination was done for all acute abdominal emergencies, to arrive at preoperative diagnosis. After admission routine investigations namely hemoglobin (Hb%), total count (TC), differential count (DC), urine examination were carried out. Relevant procedure like plain X-ray abdomen was taken in some cases. In 40 cases operative findings and postoperative diagnosis were recorded. 10 cases recorded as managed by conservatively.

Results:

In our present study, out of 50 patients male dominance (62 %) was noted. Mean age was noted 42.22 years with SD 7.21 years.

The 82 % patients admitted were in as emergency with complaints of acute pain in abdomen.

Initially all patients were assessed with required investigations.

Investigations	Number of patients	Found positive
	(N=50)	correlations
USG	14	9
X RAY	18	10
CT Scan	4	2

Table 1) Radiological Investigations carried out in study patients

Out of 50 cases only 4 patients were send for CTscan of them in 2 patients we found positive correlations. USG was done in 14 cases of them there was found positive correlations in 9patients.

Diagnosis	Number of patients	Percentage
	(N=50)	
Acute appendicitis	18	36
Perforated duodenal ulcer	4	8
Gastric perforation	3	6
Acute pancreatitis	4	8
Renal colic pain	7	14
Acute intestinal obstruction	5	10
Others	9	18

Table 2) Diagnosis of admitted cases

In our present study 36 % cases were found from acute appendicitis.

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Duration of hospital stay.	Number of patients	Percentage
	(N=50)	
Less than 7 days	18	36
7 – 15 days	25	50
More than 15 days	7	14

Table 3) Duration of hospital stay.

In our study 50 % patients duration of hospital stay was 7 - 15 days.

Discussion:

Evaluation of the emergency department patient with acute abdominal pain is sometimes difficult. Various factors can obscure the presentation, delaying or preventing the correct diagnosis, with subsequent adverse patient outcomes. Clinicians must consider multiple diagnoses, especially those life-threatening conditions that require timely intervention to limit morbidity and mortality. (4)

In patients presenting with Acute Abdomen, there may be various pathologies like Acute Appendicitis, Acute Cholecystitis, Acute Pancreatitis, Various perforation etc.; hence exact diagnosis is required for planning proper management [2]. In this study out of the 110 patients who presented specifically with symptoms of Acute Abdomen were Undergone various investigation and managed according to diagnosis are selected for the study.

Despite the increased use of diagnostic laboratory and imaging modalities, acute AP remains a major diagnostic challenge. As already stated, the underlying causes for the acute AP vary across age groups. This leads to a large variation in choices regarding diagnostic modalities and treatment. The major challenges in children arise from often nonspecific symptoms, lack of classical presentation in many instances, and difficulty in performing a complete and reliable examination. In addition, avoidance of unnecessary radiation exposure associated with some diagnostic modalities, especially abdominal–pelvic computed tomography (CT) scan, and higher numbers of negative surgical explorations have become major concerns in children. (5,6)

Conclusion:

Acute abdomen is often a surgical emergency and a challenge to any surgeon. Rigorous approach to diagnose is mandatory. Acute appendicitis was the most common cause of abdominal surgical emergency.

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