

Clinical Profile of Patients with Acute Abdomen at a Tertiary Care Hospital

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Abstract

Introduction: The most powerful aid to the clinician in reaching a management decision in the acute abdomen is a thorough history and clinical examination, with urgent investigations playing a secondary role. *Methodology:* All 50 patients who present with acute abdomen including blunt trauma to abdomen and post-operative cases were included for study and evaluated. *Results:* The most common symptom in our study was pain abdomen, present in all 50 cases followed by distention in 30 cases (78.00%), vomiting 29 cases (58.00%) and least being constipation in 22 cases (44.00%). *Conclusion:* Acute abdomen should be treated as a surgical emergency unless proved otherwise.

Keywords: Acute Abdomen; Perforation; Peritonitis.

Introduction

Acute disease within the abdomen is common in many patients with acute abdominal symptoms present every day to doctors working in the community. Within a Western population of half a million people, between 5 and 10 patients are admitted to a surgical ward each day with acute abdominal pain. One or two more will complain of acute abdominal symptoms after an accident [1].

Julian Britton defines it as "the illness which starts

suddenly and most patients present to a hospital within seven or ten days of the onset of symptoms" [1].

Jones S. R. describes the term acute abdomen as "symptoms and signs of intra-abdominal disease usually treated best by surgical operation" [2].

When faced with a patient with acute abdominal pain, the admitting surgeon has two options: either to perform exploratory surgery, or to observe for a variable period, perhaps instituting further investigations to help to reveal the diagnosis. In at least 20% of patients, the decision to operate may be uncertain and the surgeon must then make a calculated gamble to either "look and see" or "wait and see" policy [3].

The most powerful aid to the clinician in reaching a management decision in the acute abdomen is a thorough history and clinical examination, with urgent investigations playing a secondary role. It has been recognized for many years that diagnostic accuracy in the acute abdomen is low but can be improved by up to 20% using computer aided diagnosis. This improvement is associated with a corresponding reduction in management errors. The clinical data (history and examination) are collected on a structured proforma and then entered into a computer, which produces a list of diagnostic probabilities [3].

Methodology

In this cross sectional study, all patients with inclusion criteria attending to department of surgery were included.

Inclusion Criteria

All patients who present with acute abdomen

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including blunt trauma to abdomen and post-operative cases are included for study and those who give consent for study

Exclusion Criteria

- All pregnant patients
- All patients suspected of acute intestinal obstruction
- All patients with extensive abdominal scar
- All patients with acute non perforative biliary tract disease.
- All patients with renal or ureteric calculi.
- All patients with diagnosed coagulation disorders

A total of 50 cases were studied during the period. Patients were evaluated in the following ways.

1. Accurate history was taken with respect to the
 - Pain - Onset, type, site, progress, aggravating and relieving factors.
 - Vomiting.
 - Distention of abdomen.
 - Bowel and bladder disturbance.
 - Menstrual disturbance.
2. Vital signs of the patient were recorded.
3. Thorough clinical examination was done for the evidence of abdominal tenderness, guarding, Rigidity, obliteration of liver dullness and peristaltic sounds.

Based on the history and clinical examination, provisional clinical diagnosis was made and routine investigations like CBC, Urine; routine and

microscopy and minirenals were done in all patients. Specific investigations like erect X-rays abdomen, USG abdomen and pelvis and CT was done depending on provisional diagnosis and their requirement.

Before the patient was subjected to the four quadrant peritoneal tap, erect X-ray abdomen was done, reasons being, the theoretical chances of air being either introduced into the peritoneal or sucked from the peritoneal cavity while performing the procedure.

Results

Ages between 21-30 years were the most common in our present study. Out of 50 cases 13 were from this age group. Next common age group was between 31-40 years, which constituted 10 cases followed by 51-60 age groups, which constituted 8 cases

Out of 50 cases studied, there were 37 male patients and 13 female patients. In this study males were affected more than the females.

The most common symptom in our study was pain abdomen, present in all 50 cases followed by distention in 30 cases (78.00%), vomiting 29 cases (58.00%) and least being constipation in 22 cases (44.00%).

In the present study majority (48) of cases presented with tenderness and Guarding. Rigidity was noted in 46 cases, and liver dullness was obliterated in 33 cases. Tachycardia was noted in 23 cases. Diagnosis of shock was made in 16 cases.

Out of 50 cases 37 were due to non-traumatic abdominal pathology and 13 cases were caused by traumatic factor.

Table 1: Sex incidence

Sex	No. of Cases	Percentage
Males	37	74
Females	13	26
Total	50	

Table 2: Symptoms

Symptoms	No. of cases	Percentage
Pain	50	100
Distention	39	78
Constipation	22	44
Vomiting	29	58

Table 3: Signs

Signs	No. of cases	Percentage
Tenderness	48	96
Guarding	48	96
Rigidity	46	92
Liver dullness obliteration	33	66
Shock	16	32
Tachycardia	23	46

Table 4: Causes of acute abdomen

Causes of acute abdomen	No. of patients
Non traumatic	37
Traumatic	13

Discussion

In our present series, acute abdominal disease was more common in the male sex. 37 out of 50 cases were male accounting for 74.00% and 13 were females accounting for 26.00%. Males dominated in the blunt trauma abdomen. This is probably because of active involvement of males in day to day life and high incidence of trauma under the influence of alcohol. Positive tap reported in the literature ranges from 52-100%. In the present series we got the positive tap in 46 out of 50 cases with an accuracy of 92.00%. This positive rate is in close confirmation with the observation made by other workers.

- Rao S.P.S (1977) performed a study on 100 cases and their positive tap rate was 81.00% [4].
- Trivedi D. R. et al. (1971), in their series of 70 cases had positive taps in 57 cases amounting to 81.00% [5].
- Khan M. (1975) in their series of 56 cases had 46 positive tap amounting to 82.14% [6].
- Baker W. N. (1967) in an unselected series of 101 patients, found positive results in 83% [7].
- Lamke L. O. (1978) did a study on 114 patients with a positive rate of 90% [8].
- Sloop R.G.(1978) reported 94% positive rates in his study of 65 cases [9].
- McPartlin J. F. (1971) in his study on 100 cases had positive rate of 67% [10].
- Giacobine J. W. (1960) performed diagnostic paracentesis in 130 patients with a positive rate of 82% [11].
- Prout W. C. (1961) had 72% positive rate in his study [12].
- Majority of cases in our series was in non-traumatic acute abdomen. 37 out of 50 cases were in this group, accounting for 74%. Peritoneal paracentesis was positive in 35 cases accounting for 94.00%. Approximately similar reports have been published in the literature.

Conclusion

No acute abdomen case should be neglected until fully investigated for the emergency surgical

intervention to avoid the complications and mortality

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