

Pattern and Management Outcome of Acute Abdomen in Surgical Emergency Cases at a Tertiary Care Centre: A Prospective Study

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Abstract: ***Background:** Acute abdomen is one of the commonest surgical emergencies requiring urgent diagnosis and treatment. **Aim:** To evaluate clinical profile, causes, management, and outcomes of acute abdomen in a tertiary care hospital. **Methods:** A prospective observational study was conducted in the Department of Surgery, affiliated with, during 2024–2025. Two hundred patients presenting with acute abdomen were included. Demographic data, diagnosis, treatment, complications, and outcomes were analyzed. **Results:** Majority of patients were aged 21–40 years (45.5%), male (67%), and from rural background (57%). Common symptoms were right iliac fossa pain (38%), vomiting (54%), and fever (74%). Acute appendicitis was the most common diagnosis followed by perforation peritonitis and intestinal obstruction. Surgical treatment was required in 79.5% patients. Postoperative complications occurred in 29%, while mortality was 3.5%. Delayed presentation, shock, and age >60 years were associated with adverse outcomes. **Conclusion:** Acute abdomen commonly affects young adults and frequently requires operative management. Early diagnosis, resuscitation, and timely surgery reduce morbidity and mortality.*

Keywords: Acute abdomen, appendicitis, perforation peritonitis, intestinal obstruction, emergency surgery

1. Introduction

Acute abdomen is defined as sudden onset abdominal pain requiring urgent evaluation and possible surgical intervention. It includes multiple life-threatening conditions such as appendicitis, perforation, obstruction, and pancreatitis. Delay in treatment increases complications and mortality. This study was conducted to assess the pattern and management outcomes of acute abdomen at a tertiary care centre.

2. Materials and Methods

This prospective observational study included 200 consecutive patients admitted with acute abdomen under surgical emergency services during 2024–2025.

Patients with traumatic, gynecological, urological, and chronic non-surgical causes were excluded.

Data recorded included age, sex, symptoms, diagnosis, investigations, treatment, complications, ICU admission, and mortality.

Statistical analysis was performed using SPSS. P value <0.05 was considered significant.

3. Results

Among 200 patients, 91 (45.5%) were aged 21–40 years. Males were 134 (67%).

Most common diagnoses were:

- Acute appendicitis
- Perforation peritonitis
- Intestinal obstruction

Surgical management was done in 159 (79.5%) patients. Appendectomy was the commonest procedure.

Complications occurred in 58 (29%) patients. Mortality was seen in 7 (3.5%) patients.

Poor prognosis was associated with:

- Age >60 years
- Delayed presentation >48 hours
- Shock at admission

Young adults were most commonly affected, mainly due to appendicitis. Delayed presentation increased complications and ICU requirement. Similar findings are reported in other tertiary care studies. Early referral and prompt surgical intervention remain key determinants of survival.

4. Conclusion

Acute abdomen remains a common emergency surgical condition. Appendicitis is the leading cause. Timely diagnosis and treatment significantly improve outcomes.

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Conflict of Interest: None declared

Ethical Approval: Obtained from Institutional Ethics Committee

References

- [1] Schwartz SI. Principles of Surgery.
- [2] Sabiston Textbook of Surgery.
- [3] WSES Guidelines for acute abdomen management.