

Clinical Spectrum and Surgical Management of Intestinal Obstruction in a Tertiary Hospital in India

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Abstract: *Intestinal obstruction is one of the commonest causes of surgical emergency in India. Most common etiology of intestinal obstruction is post-operative adhesions followed by malignancies, intestinal ischemia and obstructed/strangulated hernias. This study aims at finding out the etiology, clinical presentation and surgical management and morbidity in a tertiary care hospital.*

Keywords: surgical, etiology, management

1. Introduction

Intestinal obstruction is one of the most common causes of surgical emergencies in India. Most common etiology is adhesions and carcinoma leading to impairment and obstruction of passage of intestinal contents through the bowel.

2. Materials and Methods

It's a retrospective Study conducted in Government general hospital Guntur in 100 patients admitted in surgical emergency from June 2019 to December 2019.

3. Aims and Objectives

- To study various etiologies of intestinal obstruction.
- To study various modes of clinical presentation of intestinal obstruction.
- To study surgical management and post-operative complications of the operated case.

4. Case Study

This is a retrospective study conducted between January 2019 to December 2019 in a tertiary hospital, Government General Hospital, Guntur. A total of 100 cases are included in the study based on inclusion criteria.

Inclusion criteria

Patients with positive findings in x-ray erect abdomen ultrasound abdomen.

Patients willing for surgery.

Exclusion criteria:

- Patients treated conservatively

- Pregnant women and children below 13 years with acute abdomen

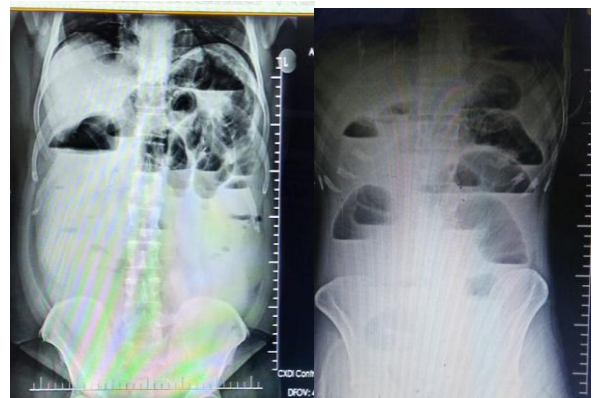


Figure 1: X-ray erect abdomen showing multiple air fluid levels suggestive of intestinal obstruction

In the present study, detailed history and physical examination was done for all acute abdominal emergencies. X-ray erect abdomen, ultrasound abdomen and routine blood investigations were carried out.

5. Results

In the present study a total of 100 cases were taken for the study, of which the most common cause was adhesions following previous abdomen surgeries followed by malignancy and mesenteric ischemia.

Most common mode of investigation was x-ray erect abdomen showing multiple air fluid levels. Most common presentation was abdominal pain followed by vomiting, distension and constipation.

Most common surgical procedure carried out is adhesiolysis, followed by resection and anastomosis and colostomy. The commonest age group affected was 40-65 years.

The main complications were wound infection, septicaemia followed by ARDS. The highest mortality is in patients presenting late and with peritonitis.

Males are most commonly affected with ratio 2:1

Table 1: Causes of intestinal obstruction.

Signs and Symptoms	Number of cases	Percentage
Pain abdomen	95	95
Vomiting	66	66
Constipation	58	58
Obstipation	53	53
Distension	62	62
Tenderness	87	87
Rigidity	60	60
Tachycardia	74	74
Mass	31	31



Figure 2: Intraoperative pic showing small bowel adhesions following previous surgeries; Adhesiolysis is done with resection and anastomosis



Figure 3: Intra-operative pics showing gangrenous small bowel resection of the gangrenous bowel with end to end anastomosis was done with ileostomy

Table 2: Signs and symptoms

Causes	Number	Males	Female
Adhesions	52	30	22
Malignancy	19	13	7
Mesenteric ischemia	14	12	5
Obstructed hernias	5	4	1
Intestinal tuberculosis	6	5	1
Volvulus	3	1	2
Intussusception	1	0	1



Figure 4: Intra-operative pic showing strangulated inguinal hernia with perforations and gangrene

6. Discussion

Intestinal obstruction still remains one of commonest causes of surgical emergencies in India. Most common cause of intestinal obstruction is post-operative adhesions which can be prevented by skillful precision and avoiding mishandling of the bowel.

Second common cause is malignancy. Early diagnosis and management are required for the diagnosis.

Mesenteric ischemia has been increasing in number from a few years which is due to smoking, atherosclerosis, hypercoagulable states. Males are most affected than females.

Resuscitation and surgery remains the main modality of treatment. Morbidity is less in early presentation, prompt medical and surgical management and post-operative care. Peritonitis is one of the major factors for morbidity.

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