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A CLINICAL STUDY ON INTESTINAL OBSTRUCTION AND ITS MANAGEMENT IN A RURAL AREA OF TAMILNADU.

KEYWORDS

Intestinal obstruction, rural area, surgical emergency

Dr.M.Pachaipondy M.S

Assistant Professor, Department of General Surgery, Govt.Chengalpattu Medical College, Chengalpattu

Dr.M.Vijayalakshmi M.D

Associate Professor, Deparment of Community Medicine, Govt.Stanley Medical College

ABSTRACT

Background: Intestinal obstruction is one of the common acute abdominal emergencies in surgical practice. Early recognition and prompt intervention can prevent irreversible ischemia and thereby decreasing the mortality and long term morbidity. Aim : To find out the Incidence, causes, presentations and management of patients with intestinal obstruction at the surgical department, Govt. Chengalpattu Medical College. Methodology: This study was conducted at Government Chengalpattu medical college and hospital for a period of two years from June 2014 to June 2016. It is a descriptive study that included patients who were diagnosed to have Acute Intestinal Obstruction based on clinical, biochemical and radiological features. The patients who were managed conservatively without surgical intervention were excluded. Other investigations for fitness for anaesthesia i.e, complete blood picture, electrolytes, urea, creatinine, ECG were taken. Final diagnosis was made at exploratory laparotomy. The operative details, e.g, cause, site of obstruction and operative procedure were recorded. Biopsy was taken where required for histopathological confirmation. Postoperative complications and outcome were noted. Results: Number of patients admitted with Intestinal Obstruction were 100. Of the100 patients, 83 were due to small bowel obstruction and 17 were due to large bowel obstruction. Most common age group affected was between 51 to 60 years. Males were more commonly affected. Obstructed inguinal hernia (32%) was found to be the most common cause followed by adhesive obstruction (26%). Most of the cases presented with abdominal pain (94%), vomiting (69%), constipation (58%) and abdominal distension (52%). Most common surgical procedure was hernia reduction and repair followed by resection and anastomosis / colostomy. Most of the cases recovered without any complications (76%).

Introduction:

Intestinal obstruction is one of the common acute abdominal emergencies in surgical practice. Early recognition and prompt intervention can prevent irreversible ischemia and thereby decreasing the mortality and long term morbidity. The most frequent causes of intestinal obstruction are postoperative adhesions and hernias, which cause extrinsic compression of the intestine. Less frequently, tumours or strictures of the bowel can cause intrinsic blockage. This study was planned to assess the incidence and management of patients with Intestinal obstruction in a rural setup after obtaining Ethical Clearance from the institution.

Methodology:

This study was conducted at Government Chengalpattu medical college and hospital for a period of two years from June 2014 to June 2016. It is a descriptive study that included 100 patients who were diagnosed to have Acute Intestinal Obstruction based on clinical, biochemical and radiological features. The patients who were managed conservatively without surgical intervention were excluded. Other investigations for fitness for anaesthesia i.e, complete blood picture, electrolytes, urea, creatinine, ecg were taken. Final diagnosis was made at exploratory laparotomy. The operative details,e.g, cause, site of obstruction and operative procedure were recorded. Biopsy was taken where required for histopathological confirmation. Postoperative complications, outcome and mortality were noted. The details of the patients age, sex, symptoms at presentation, investigations, intra-operative findings and other outcome were recorded.

INCLUSION CRITERIA:

- All patients presenting to emergency department with features of intestinal obstruction and treated surgically.
- Patients in the age group 15 to 80 years.
- Patients who were haemodynamically stable

EXCLUSION CRITERIA:

Patients presenting with subacute intestinal obstruction.
Paediatric age group patients

Results:

Total number of patients admitted with Acute Intestinal Obstruction from June 2014 to June were 2016- 100. Large intestine obstruction – 17 and Small intestine obstruction – 83.Most common age group affected was between 51-60years (25 patients) followed by 61-70years (23 patients). The mean age of incidence was 55.5years. 64% were males and 36% were females. Most common cause of acute intestinal obstruction was found to be obstructed/strangulated inguinal hernia which accounted for 32% of cases. Second most common cause was found to be adhesions which accounted for 26% of cases. Obstructed incisional and umbilical/paraumbilical hernia contributes 9% and 8% of total cases respectively. Most of the cases presented with abdominal pain (94%), followed by vomiting (69%), constipation (58%) and abdominal distension (52%). Most common radiological finding was multiple air fluid levels seen in plain X-ray abdomen erect view which was seen in 81 patients followed by dilated bowel loops seen in 52 patients and bent inner tube appearance in 6 patients. Most common surgical procedure was hernia reduction and repair which included inguinal, femoral, incisional and paraumblical hernia repairs. Next common procedure was adhesiolysis followed by resection and anastomosis / colostomy. Most of the cases recovered without any complications(76%). Infection was the major case of morbidity and was seen in 18% of patients. Of 6 deaths 4 were due to sepsis and remaining 2 were due to aspiration.

Discussion:

Acute intestinal obstruction remains to be one of the common emergency surgeries. Males are commonly affected mostly during their fifth decade. Obstructed/ strangulated inguinal hernia remains to be the most common cause followed by adhesions. They usually present with abdominal pain with multiple air fluid levels in their X-ray abdomen erect view. The initial management of patients with acute intestinal obstruction should focus on aggressive fluid replacement, decompression of the obstructed bowel, and on prevention of aspiration. Surgery remains the cornerstone of treatment.

Earlier diagnosis and timely intervention are associated with excellent prognosis. Delayed diagnosis leading to strangulation and increased age are associated with poor outcomes.

Table:1 AGE DISTRIBUTION OF PATIENTS

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S.NO	Age in years	No of patients
1	11-20	4
2	21-30	12
3	31-40	11
4	41-50	15
5	51-60	25
6	61-70	23
7	71-80	10

Table:2 Distribution by Causative factors:

S.NO	CAUSE	NO. OF CASES
1	obstructed inguinal hernia	32
2	adhesive obstruction	26
3	ileocaecal Tb	3
4	umbilical/paraumbilical hernia	8
5	incisional hernia	9
6	femoral hernia	1
7	intussusception	1
8	descending colon growth	2
9	sigmoid colon growth	4
10	rectum/ anal canal growth	5
11	sigmoid volvulus	6
12	SMA syndrome	2
13	internal hernia	1

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