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Surgery

Study of Intestinal Obstruction its Etiological Factors and Management: At Tertiary Care Hospital

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Abstract

Original Research Article

Commonest surgical problems and surgical emergency is acute intestinal obstruction. Our aim was to know the prevalence and the other related aspects of acute intestinal obstruction in 30 to 70 age group .31 patients out of 893 patients presented with acute intestinal obstruction in our setup were required surgical management. Majority age group was between 30 to 70 yrs of age with maximum 6th decade of life. Patients who addicted to alcohol, tobacco chewing, opium and habitual smokers were mostly suffered. Male suffered more than females. Majority of the patients presented with abdominal distention, vomiting, pain abdomen followed by constipation.

Keywords: Intestinal obstruction, pain abdomen, distension.

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INTRODUCTION

Acute intestinal obstruction is a common and frequent surgical emergency. Intestinal obstruction is a mechanical or functional obstruction of the intestine preventing the normal transit of fecal matter. Success of the treatment of acute intestinal obstruction depends largely upon early diagnosis, skillful management. The main concern in intestinal obstruction is to evaluate properly and early to prevent gangrene. Intestinal obstruction remains a challenge to surgeon despite advances in field of medicine, pathology, surgical technique and conservative management. The main stay of the treatment in intestinal obstruction include gastro duodenal suction, IV fluid administration and operative management i.e diagnostic laproscopy and exploratory laprotomy.

MATERIAL AND METHOD OF THE STUDY

An analytical study carried out in a period over one year from November 2016 to November 2017 in the department of general surgery in world medical college jhajjar Haryana. Total number of patients admitted was 893 of intestinal obstruction out of which 31 required surgical management. These acute intestinal obstruction patients were thoroughly analysed, a separate Performa was maintained for history, histopathological, clinical examination, and radiological was carried out to confirm the clinical diagnosis.

Preoperative management

All the relevant steps were undertaken to monitor and management of patients. General condition was improved with management of patients taken up for surgery.

Etiological factors

Out of 31 patients, 19 patients had external hernias, 4 patients had adhesions and bands, sigmoid volvulus in 2 patients, colonic growth in 3 patients, intussuseption in 1 patient and abdominal tuberculosis in 2 patients.

RESULTS

Presenting symptoms amongst which abdominal pain was the most common complaint followed by vomiting, abdominal distension, constipation

Symptoms were

Table-1

Sl	symptoms	No of	Percentage
no.		patients	
1	Abdominal pain	31	100 %
2	Vomiting	30	96.77%
3	Abdominal distension	30	96.77%
4	Constipation	28	90.32 %

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Age incidence

Age varies from 30 to 70 years

Table-2

	Tuble 2				
	Age in years	No. of patients			
ſ	30 - 40	4			
ſ	40 – 50	7			
ſ	50 - 60	12			
	60 – 70	8			

Sex incidence

Incidence of intestinal obstruction were more in males than females.

Table-3

Sex	No. of patients	% percentage			
Male	24	77.4 %			
Female	7	22.5 %			

Incidence in relation to socioeconomic status

Incidence of intestinal obstruction was more in patients with low socioeconomic group i.e 19 patient (61.2%). 12 cases were from high socioeconomic status group

Incidence of personal history

Incidence of intestinal obstruction were more in smokers, alcoholic, tobacco chewers, and opium addicts. Maximum cases 77.4 % were noted in non-vegetarian.

Surgery timing

Surgery was performed within 24 hours in the majority of patients (in 28 patients) and rests were operated after 24 hours from first presentation in our department. The procedure was diagnostic laproscopy followed by exploratory laprotomy.

Table-4

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Surgery timing	No of patients			
< 24 hrs	28			
• 24 hrs	3			

Types of procedures

Table-5

Table-5					
Types of procedures	No of patients	Percentage			
Hernia repair	19	61.2 %			
Adhesiolysis	4	12.9%			
Resection and anastomosis	1	3.2%			
Stricturoplasty	2	6.4%			
Resection and colostomy	5	16.1%			
Others					

DISCUSSION

Study reveals acute intestinal obstruction is a major cause of emergency in general surgery. In our study obstructed hernia is the first and the most common cause of intestinal obstruction 17 patients out of 31 admitted patients were diagnosed as inguinal hernia and all were male. Similar results also presented

by some research works [1, 2]. All were operated in first 24 hours of first presentation of patient in emergency/opd in department of general surgery. A total of 2 femoral hernia cases were operated and all were females. Majority of patients were males and labour by occupation in brick making factories (bhatha majdoor) patients taken in our study were in the age group of 30 to 70 years with maximum incidence of inguinal and femoral hernia in 5 th decade of life second most common cause diagnosed was adhesional bands due to some pathology in the past. Maximum patients were bidi smoker, tobacco chewer, opium addict, alcohol addict [1, 2]. In these patients post oprative complications like surgical site infections, burst abdomen, etc. was noted more as compare to nonaddicted patients. Complications were more common in poorly nourished patients. Cardinal symptoms noted in all selected patients for study were abdominal pain, abdominal distension, vomiting followed constipation. Mostly patients presented in department within 24 hours of onset of symptoms out of which mostly were operated within first 24 hours after admission to hospital. Common site of obstruction in operated patients was small intestine. Gangrene noted in 3 patients with peritonitis for which resection and anastomosis was done and peforation found in 2 patients for which perforation repair was done. 2 patients presented with intestinal obstruction had abdominal tuberculosis with multiple strictures and adhesion bands in distal ileum were operated and adhesiolysis done with removal of obstructive bands and ATT was started in these patients. In our study mortality rate was (3.2%) one patient died in postoperative care due to septiceamia.

CONCLUSION

Every day came with a new challenge and new thought Acute intestinal obstruction is the main surgical emergency challenge in today's advance era of medical science early clinical assessment investigations and decision of management improves survival rate of patients of acute intestinal obstruction in this region.

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