

Analysis of Patients Undergoing Laparotomy in Acute Abdominal Conditions in CMCH (A Tertiary Care Hospital) Coimbatore

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ARTICLE INFO

Published Online:
26 November 2018

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ABSTRACT

Aim : To Analyse various acute emergency abdominal conditions presenting to the emergency department in Coimbatore medical college and hospital.

Methodology : Patients presenting to the emergency room of Coimbatore Medical College and Hospital with features of acute abdominal conditions such as hollow viscus perforation , acute intestinal obstruction , blunt injury abdomen and ruptured liver abscess are included in this study.

Results : Total number of patients included in the study group are 55. The most common age group is between 20 to 30 years. Total number of male patients are 42 and female patients are 13. Most common diagnosis in patients undergoing emergency laparotomy in male patients is perforative peritonitis and in female patients is acute intestinal obstruction.

Conclusion : Hollow viscus perforation leading to perforative peritonitis has been identified to be the most common cause of acute abdominal condition in male patients and acute intestinal obstruction in female patients undergoing emergency laparotomy in Coimbatore Medical College and Hospital.

KEYWORDS: acute , abdomen , laparotomy , analysis

Introduction

Patients presenting with features of acute emergency abdominal conditions should be identified and evaluated at the earliest instance in the emergency room. Patients usually complain of acute onset of abdominal pain which is progressed to the current severity level. Patients might present with a history of fever with or without constipation or obstipation. On examination of these patients , guarding or rigidity will be a definitive finding with which further evaluation has to be undertaken to evaluate and rule out acute abdominal conditions in order to make a decision for planning a surgical intervention in these patients.

Many studies have been undertaken in various institutions describing the common causes of acute abdominal conditions presenting to their emergency department. Hollow viscus perforation , acute intestinal obstruction and ruptured liver abscess are some of the common acute abdominal conditions which require an emergency laparotomy for the definitive management of the underlying condition.

Patients undergoing emergency laparotomy were evaluated with routine blood investigations and were prepared for the procedure. Patients were followed up in the

post operative period till and were discharged after removal of drains.

MATERIALS AND METHODS

Study Area:

Coimbatore Medical College Hospital [CMCH], Coimbatore. Study population: Patients admitted in the emergency department of CMCH with a diagnosis of hollow viscus perforation , acute intestinal obstruction , ruptured liver abscess , sigmoid volvulus and blunt injury abdomen.

Inclusion criteria:

1. Patients diagnosed to have acute emergency abdominal conditions.
2. Patients above 18 years
3. Patients who are willing for emergency laparotomy.
4. Patients willing for follow up.

Study Period:

10 Months. From December 2017-September 2018

Sample Size:

55. All patients eligible by inclusion criteria are to be included in the study.

Study Design:

An observational study is to be conducted on patients admitted in CMCH for the above study. Informed consent will be taken from each respondent.

Observation and Analysis:

Table [1] :

Gender	Number	Percentage	Mean	Range
Male	43	78%	50	20-80
Female	12	22%	50	20-80

From the above table, the total number of male patients included in the study group are 43 which is 78% of the total study population and female patients are 12 which is 22% of the total study population. The range of age group of both the male and female study population is 20-80 years.

Table [2] :

Age Group	Male	Female	Total
18 - 20 Years	1	1	2
20 – 30 Years	13	3	16
30 – 40 Years	6	1	7
40 – 50 Years	7	1	8
50 – 60 Years	8	4	12
60 – 70 Years	6	-	6
70 - 80 Years	2	2	4
Total	43	12	55

From the above table , the most common age group of the study population included is 20-30 years and the second most common age group is 50-60 years. The least common age group noted in the study population is less than 20 years.

Table [3] :

Male Patients:

Diagnosis	Number Of Cases	Percentage
Perforation	24	44%
Obstruction	12	21%
Sigmoid Volvulus	1	2%
Blunt Injury Abdomen	4	4%
Liver Abscess	4	7%
Total	43	78%

From the above table , it is described that the most common diagnosis in male patients undergoing emergency laparotomy is hollow viscus perforation which are 24 cases whose percentage is 44%. The second most common diagnosis is acute intestinal obstruction which accounts for 21% and the least common diagnosis is sigmoid volvulus which accounts for 2%.

Table [4] :

Female Patients :

Diagnosis	Number Of Cases	Percentage
Perforation	3	5%
Obstruction	6	11%
Sigmoid Volvulus	2	4%
Blunt Injury Abdomen	0	0%
Liver Abscess	1	2%
Total	12	22%

From the above table, it is described that the most common diagnosis in female patients undergoing emergency laparotomy is acute intestinal obstruction which are 6 cases whose percentage is 11% of the study population. The second most common diagnosis is hollow viscus perforation which accounts for 5% and the least common diagnosis is ruptured liver abscess which accounts for 2% of the study population.

CONCLUSION

Patients presenting to the emergency department of Coimbatore medical college and hospital with features of acute abdominal conditions were analysed. The most common age group of patients was found to be 20-30 years in which most of the patients included in the study group were male patients. The most common diagnosis in male patients undergoing emergency laparotomy was found to be hollow viscus perforation and in female patients acute intestinal obstruction. The patients were followed up during the post operative period and were discharged after the removal of drains.

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