



SPECTRUM OF PERFORATION PERITONITIS IN A TERTIARY CARE HOSPITAL IN JAMMU

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ABSTRACT Perforation peritonitis is one of the commonest surgical emergency encountered by surgeons. The etiology of perforation peritonitis in India has a different spectrum than western world. Upper gastrointestinal tract perforations predominate in India contrary to western population where lower gastrointestinal tract perforations predominate.

AIMS AND OBJECTIVES: To study the spectrum of perforation peritonitis managed in a tertiary hospital in Jammu.

METHODS: A prospective randomised control study in 60 patients admitted as a case of perforation peritonitis in terms of cause , site of perforation , surgical treatment and complications was carried out in Government Medical College , Jammu over a period of one year from 1st November to 31st October 2018. All the patients were resuscitated, investigated and emergency exploratory laparotomy was done and the site of perforation was found and controlled.

RESULTS: The most common cause of perforation peritonitis in our study was perforated duodenal ulcer (28 cases) followed by appendicular perforation (20 cases) , ileal perforation (8 cases) , gastric perforation (2 cases) and jejunal perforation (2 cases). Mortality rate in our study was 6.7 %.

CONCLUSION : The spectrum of perforation peritonitis in Jammu differs from the western world. Upper gastrointestinal tract perforations constituted majority of the cases which is contrary to the western world where perforations are commonest in distal gastrointestinal tract. The commonest cause of perforation in our set up was duodenal ulcer perforation . There was no large bowel perforation

KEYWORDS :

BACKGROUND

Perforation peritonitis is one of the commonest emergencies encountered by the surgeons¹. The perforation of proximal gastro intestinal tract is more common than distal tract in developing countries in contrast to developed countries where distal perforations are more common². Gastroduodenal perforation is the most common cause of perforation peritonitis³. Peritonitis usually presents as acute abdomen. Local findings include abdominal tenderness, guarding or rigidity, distension, diminished bowel sounds. Systemic findings include fever, chills or rigors, tachycardia, sweating, tachypnea , restlessness, dehydration, oliguria , disorientation and ultimately shock⁴. The overall mortality due to perforation peritonitis ranges between 6 and 27 %⁵.

AGE DISTRIBUTION

AGE	TOTAL	Percentage
16-25	14	23.33 %
26-35	14	23.33 %
36-45	9	15 %
46-55	11	18.34 %
56-65	6	10 %
66-75	6	10 %
TOTAL	60	100 %

Out of a total of 60 patients in the study, the maximum number of patients presenting with perforation peritonitis were in the age group varying from 16-35 years (56.66 %) with age group of 16-25 and 26-35 contributing equal number of cases (23.33%). The youngest patient was 17 years old and the oldest patient was 75 years of age. Mean age of the patients was 40.9 years.

SEX DISTRIBUTION

MALE	FEMALE	TOTAL
48	12	60

Male constituted 80 % of the patients while females constituted 20 % of the patients with male:female ratio of 4:1.

SITE OF PERFORATION

Site Of Perforation	Male	Female	Total
Duodenal Ulcer	26	2	28
Appendix	14	6	20
Ileum	4	4	8
Stomach	2	0	2

Jejunum	2	0	2
Total	48	12	60

The cause of perforation peritonitis in maximum number of patients was duodenal ulcer perforation in 28 (46.7%) cases in which 26 were males and 2 were females followed by appendicular perforation in 20 (33.3%) cases in which 14 were males and 6 were females . Ileal perforation contributed 8 cases (13.34%) with 4 males and 4 females while both stomach and jejunal perforation accounted for 2 (3.33%) cases with all the patients being males.

TYPE OF SURGERY

Type Of Surgery	Number Of Patients	Percentage
Cellan Jones Repair	31	51.7 %
Appendectomy	20	33.3 %
Resection Anastomosis	2	3.3 %
Stoma	7	11.7 %

The most common surgery performed in our study was Cellan Jones repair for peptic ulcer perforation in 51.7 % cases. Appendectomy , resection anastomosis , diverting stoma were done in 33.3 % , 3.3 % and 11.7 % cases respectively.

COMPLICATIONS

Complications	Number Of Patients	Percentage
Dyselectrolytemia	9	15%
Seroma	9	15%
Wound Dehiscence	7	11.67%
Septicemia	5	8.33%
Mortality	4	6.67%

The most common complication was dyselectrolytemia in 15 % of patients, seroma at wound site was seen in 15% patients while wound dehiscence was seen in 11.67 % patients. Mortality rate was 6.67 % with septicemia with MODS being the most common cause of death.

DISCUSSION

In our study a total of 60 patients of perforation peritonitis were included . The mean age of patients in our study was 41.9 years. SARASWAT et al⁶ in their study on patients presenting with perforation peritonitis noted the mean age to be 40.5 years. Out of 60 patients in our study , 80% (48) patients were males and females constituted 20 % (12) of the patients. BAOTHAM ABM et al⁷ in their study on perforation peritonitis found out preponderance of males over females. Males accounted for 69.59% of the patients whereas females

accounted for 31.41 % of the patients. SARKAR R et al⁸ in their study on 174 patients of perforation peritonitis observed that males accounted for 82.2% of the cases and females contributed 17.8% patients. In our study the most common cause of perforation peritonitis was duodenal ulcer accounting for 46.7 % of the cases followed by appendicular perforation in 33.3% cases. GURUPRASAD NB et al⁹ in their study on 120 patients presenting with perforation peritonitis observed that duodenal ulcer perforation contributed to maximum number of patients (40 %). In our study out of 60 patients 62 % of the patients had a history of smoking while 38 % patients were non smokers. Findings of the study done by ROHIT DK et al¹⁰ goes well with the findings of our study. Out of 60 patients in our study The most common surgery performed was Cellan Jones repair for peptic ulcer perforation in 51.7 % cases. Appendectomy, resection anastomosis , diverting stoma were done in 33.3 % , 3.3 % and 11.7 % cases respectively. The study done by PATEL PB et al¹¹ goes well with findings of our study. Repair of duodenal ulcer perforation with omental patch was the commonest procedure performed in 46 % of the patients. The mortality rate in our study was 6.67% with septicemia with MODS being the commonest cause of death. The findings are consistent with the study done by OHENEH-YEBOAH M which demonstrated the overall mortality due to perforation peritonitis ranges between 6 and 27%.

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