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CLINICAL STUDY AND MANAGMENT OF PERITONITIS SECONDARY TO GASTROINTESTINAL PERFORATION

General Surgery

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KEYWORDS

INTRODUCTION

- peritonitis due to gastrointestinal perforation is commonly encountered in surgical practise presented as acute abdominal discomfort (7-10%)[1].
- peritonitis is defined as inflammation of serosal membrane that lines the abdominal cavity and the organs contained therein
- stages of peritonitis are:
- 1) stage of chemical peritonitis
- 2) stage of reaction peritonitis
- 3) stage of diffuse bacterial peritonitis[2,3].
- the majority of individuals with acute abdomen present with variety of symptoms,the most prevelant of which is abdominal discomfort associated with nausea, vomiting, fever and constipation, guarding, rigidity, tenderness and distension of abdomen[4].

Peritonitis Can Be Otherwise Divided Into

1) primary peritonitis due to hematogenous dissemination
2) secondary peritonitis due to perforation or trauma
3) tertiary peritonitis due to persistent or recurrant infection after adequate initial therapy[5,6].

- Diagnosis is confirmed by doing erect X ray abdomen which shows air under right side of the diaphragm,in few cases it is not elicited due to sealed perforation in such cases USG is advisable to look for pneumoperitoneum
- Exploratory laprotomy is only treatment that is mandatory in all cases of perforation peritonitis though nowadays endoscopic and laproscopic procedures are been tried but mainstay is Exploratory laprotomy

AIMS AND OBJECTIVES

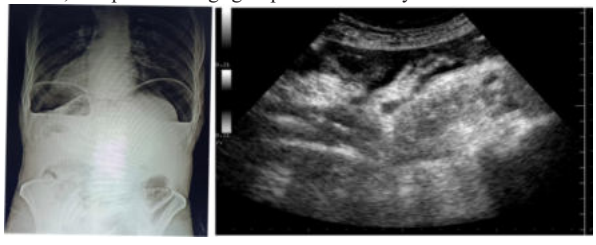
- To study managment of peritonitis due to gastrointestinal perforation
- To study immediate and early complications

MATERIALS AND METHODS

This study comprises of 24 cases of acute perforation peritonitis on whom exploratory laprotomy was done,with study period of 18 months conducted in department of general surgery,basweshwar teaching and general hospital kalaburgi.A complete detailed history, physical examination,relevant blood and radiological investigations were done,After that patients were operated,pre operative findings were correlated with intra operative and radiological findings.

Exclusion Criteria-

patients with peritonitis secondary to appendicular perforation, trauma, and paediatric age group of less then 15years



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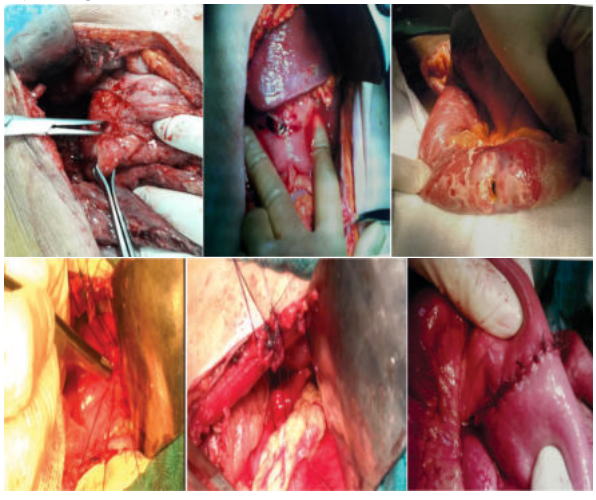

Table-1 : Distribution Of Sample By Age

Age Group In Years	Frequency	Percentage
20-35	6	12
35-49	6	12
>50	12	24
TOTAL	24	48

Table-2: Distribution Of Sample By Sex

Gender	Frequency	Percentage
MALE	18	36
FEMALE	6	12
TOTAL	24	48

Table-3: Anatomical Sites Of Perforation

Anatomical Sites Involved	Frequency	Percentage
STOMACH	4	8
DUODENUM	12	24
JEJUNUM	6	12
ILEUM	2	4
TOTAL	24	48

Table-4: Distribution Of Symptoms

SYMPTOMS	FREQUENCY	PERCENTAGE
PAIN	12	24
VOMITING	8	16
FEVER	4	8
TOTAL	24	48

Table-5: Distribution Of Pneumoperitoneum In X-ray Abdomen

Pneumoperitoneum	Frequency	Percentage
PRESENT	18	36
ABSENT	6	12
TOTAL	24	48

DISCUSSION

- Duodenum was the most common site of perforation in perforative peritonitis due to gastrointestinal perforation,next common was entric perforation,gastric and colonic perforation were found rare
- the highest number of patients was seen in the age group of 50years and above,most of the patients presented 48hrs after the onset of the clinical symptoms[7,8].
- In case of peptic ulcer perforations, pain abdomen and vomiting were predominant symptoms, tenderness, guarding, rigidity, obliteration of liver dullness were the predominant signs
- peritonitis is a life threatening complication of peptic ulcer disease, diagnosis is made clinically and confirmed by the presence of pneumoperitoneum on radiographs
- perforated peptic ulcer is a common surgical emergency and a major cause of death in elderly patients
- spontaneous ileal perforation and acute mesentric ischemia are abdominal catastrophe that carries high mortality and morbidity rates due to tuberculosis or typhoid assiciated with perforation during second week of fever,leucocytosis and elevated serum lactate levels,

OPERATIVE MANAGMENT-

All the patients of perforative peritonitis were treated as a surgical emergency. Preoperatively all patients had a broad spectrum antibiotic coverage, nasogastric suction and managment of fluid and electrolyte imbalance and oxygen supplimentation when neccesary, anemic patients required blood transfusion, postoperatively parenteral antibiotics was continued and after that oral antibiotics were given for 5 days

- 16 cases of duodenal ulcer perforation underwent Graham omental patch closure
- double layer closure of jejunal and ileal perforation was done in 3 patients
- 1 patient underwent loop ileostomy for ileal perforation
- resection of terminal ileum with end to end anastomosis was done in 4 patients of gangrenous bowel with perforation
- In all cases of peritonitis thorough peritoneal lavage was given with 0.9% saline and drains were placed in pelvis and the site of perforation which were usually removed on. 3rd and 5th postoperative day or when drainage is <50ml.
- Nasogastric tube was usually removed on 2nd or 3rd postoperative day and started orally on 4th day depending on bowel sounds
- All patients were started on chest physiotherapy from the 1st postoperative day
- Most common complication developed by patients was lower respiratory tract infection followed by surgical site infection

CONCLUSION

Early identification, fluid and electrolyte resuscitation, timely surgical intervention, antibiotic therapy, and eradication of the infectious cause are crucial variables in determining the patients prognosis for perforation peritonitis

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