ABSTRACT
AIMS OF THE STUDY

The aims of this study include:

1. To study the incidence, age and sex distribution of gastro duodenal perforation.
2. To study the etiology and clinical features of gastro duodenal perforations.
3. To study the different surgical techniques in the management.
4. To study the factors influencing the outcome of the patients.
5. To study the mortality and morbidity of gastro duodenal perforations.

MATERIALS AND METHODS

This study was conducted in the Department of General Surgery, TIRUNELVELI GOVERNMENT Medical College Hospital, TIRUNELVELI

Ninety one cases of Gastro intestinal perforations were studied during the period.

The diagnosis was established by the Emergency Surgeon provisionally, based on the clinical presentation and supporting radiological evidence, in the ward, and definitive diagnosis established at the time of operation.

Based on the time interval between the hospital admission and surgery, the surgery was categorized into,
a) Immediate - Less than 4 hours
b) Same day - 4 to 24 hours
c) Delayed - more than 24 hours

Operative details included the site of the perforation, size of the perforation, nature and quantity of peritoneal soiling, the gross appearance of the bowel bearing the perforation and the nature of operation performed. Tissue biopsies for histologic confirmation were taken in appropriate case.

Mortality was defined as death following surgery.

Morbidity was defined in terms of duration of hospital stay and associated complications following surgery.

Following details were observed from the case sheets and clinical examination.

- Patients name, age, sex, inpatient number.
- Clinical features and abdominal findings
- Delay in hours between admission and surgery
- Operative findings
- Procedure done
- Post operative complications
- Duration of hospital stay

**INCLUSION CRITERIA:**

- Cases of acute perforation due to peptic ulcer disease
• Cases of traumatic perforations – both blunt and penetrating types.

EXCLUSION CRITERIA:

• Cases of Oesophageal perforation/rupture
• Cases of perforations of hepatobiliary system.
• Cases of iatrogenic perforation during laparotomy, and gynecological procedure.
• Cases of ileum and jejunal perforation.
• Cases of appendicular perforation
• Cases of perforation of caecum and colon.
• Cases of delayed presentation with shock and septicemia whose general condition did not warrant any operative management even after resuscitative measures.

CONCLUSION

• Duodenal ulcer perforation was the commonest cause of gastrointestinal perforation with a male preponderance.
• More common in the fourth decade of life.
• More common in the lower socio-economic class of people.
• Smoking and alcohol were aggravating factors.
• Perforation was the first manifestation of peptic ulcer disease in a small percentage of patients.

• The role of nonsteroidal anti-inflammatory drugs as the cause of perforation was little in this study group.

• Radiological evidence of pneumoperitoneum could not be established in nearly one third of the patients.

• Simple closure with omental patch with thorough peritoneal toileting was very much effective.

• Definitive ulcer surgery was not warranted in the emergency and treatment with H₂ blockers and H. pylori eradication achieved good control over the disease in the follow up period.
  
  • The prognostic indicates were early hospitalization, adequate fluid replacement and no co-existing medical illness.
  
  • Gastric perforations were common in the sixth decade.
  
  • The role of biopsy in gastric perforation was established with a case proving positive for malignancy.
  
  • Closure of recent advances in closing duodenal perforation by laparoscopy and by other means, still simple closure with omental patch is widely practiced in the study group.
  
  • The most common post-operative complication was wound infection.
- Deaths were due to septicemia and cardiac arrest.
- The actual mortality was higher than the mortality in the study group since cases of delayed presentation with shock and septicemia did not warrant anaesthesia and were exclude from the study group.