



CHANGE IN TRENDS OF GASTRIC PERFORATION: A RETROSPECTIVE STUDY

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**ABSTRACT**

**Background:** Perforation peritonitis is a surgical emergency and is life threatening at many times and must be dealt with good care in an urgent basis. The knowledge about the trends in gastric perforation peritonitis and their presentation is of greatest importance in the emergent diagnosis and management of the patients in the emergency room. **Methods:** This is a observational, retrospective study done in the dept of General surgery, RIMS, Ranchi from March, 2019 to March, 2020. Our study included around 60 patients who were admitted through Emergency dept, RIMS, Ranchi. **Results:** Out of 60 patients, 50 patients were male and 10 were female. Patients of age more than 60 were commonly affected consisting of 25 patients. According to site of perforation, 32 patients had gastric antral perforations with maximum incidence. There was an increase in incidence of body of stomach perforations. **Conclusion:** In our study antral ulcer perforations were more common followed by body of stomach perforations and pre-pyloric perforations. There was a increase in incidence of perforations in body of the stomach than historically seen.

**KEYWORDS :** perforation peritonitis, Peptic Ulcer, Gastric perforation.

**INTRODUCTION:**

perforation peritonitis is a surgical emergency and is life threatening at many times and must be dealt with good care in an urgent basis. Due to availability of improved techniques early diagnosis is made possible and the mortality and morbidity is greatly reduced in recent times. The most common site of perforation peritonitis is within the upper GI tract (stomach and duodenum) and the cause in most cases is peptic ulcer disease. (1) In this study, we have studied the etiology, age and gender differences and distribution of site of perforation within the stomach. The knowledge about the trends in gastric perforation peritonitis and their presentation is of greatest importance in the emergent diagnosis and management of the patients in the emergency room.

**Aims and objectives: -**

The aim of this study is to find the trends in the site of gastric perforation and its relation according to age and etiological perspective

**Materials and methods: -**

This is a retrospective, observational study done in dept of General surgery-Rims Ranchi from March, 2019 to March 2020. The records of all patients who presented to emergency dept, RIMS with acute abdomen and free gas under diaphragm and on surgery found to have gastric perforation were retrospectively studied.

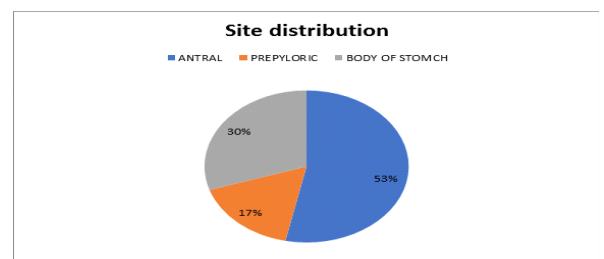
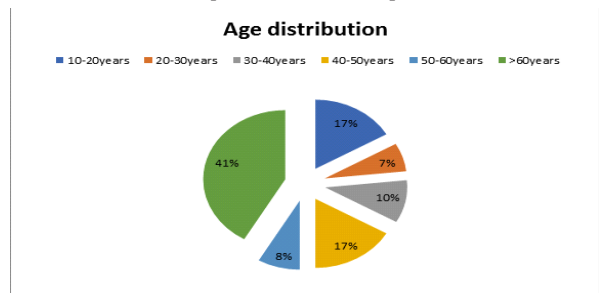
**Results:**

Out of 60 patients, 50 patients were male and 10 were female. Patients of age more than 60 were commonly affected consisting of 25 patients. According to age-wise distribution, 10 patients belonged to age between 10-20 years, 4 patients belonged to age between 20-30 years, 6 patients belonged to age between 30-40 years, 10 patients belonged to age between 40-50years, 5 patients belonged to age between 50-60 years.

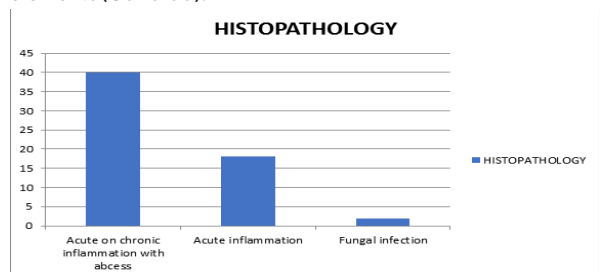
According to site of perforation, 32 patients had gastric antral perforations, 10 had perforated in the pre-pyloric region, and 18 had perforation in the body of the stomach.

When the ethological aspects are considered, 25 patients had history of chronic alcohol intake, 20 patients had history of

NSAID intake and 10 patients had history of both.



When the biopsy of the ulcer margins were analysed maximum number of biopsies showed acute on chronic inflammation with abscess (40 patients), followed by acute inflammation (18 patients), and 2 patients had fungal elements (Candida).



**DISCUSSION:**

Due to developments in the medical management of infectious diseases, there is a reduction in the incidence of proximal versus distal perforations of the GI tract. (2)

For better outcomes, early diagnosis, prompt resuscitation and urgent surgical management are the key. Rarely, when the perforation is likely to be sealed by itself, non-operative management could be tried under trial conditions in experienced hands. (3)

The Gold standard surgical procedure for gastric perforation is exploratory laparotomy and omental patch repair (3)

In one study, despite complications seen after laparoscopic procedures (longer operation time and higher incidence of re-leakage), they still recommend laparoscopic procedures to be the first choice and they claim that these complications can be reduced by allowing only trained surgeons to do such surgeries. (4)

Duodenal perforation, appendicular perforation, typhoid perforation and tubercular perforation are the common causes of perforation peritonitis in India, the spectrum of which grossly differs from that of western countries. (5)

Patients who present with ulcer complications such as perforation usually are less amenable to medical therapy, so these patients should be considered for ulcer preventive surgeries such as vagotomy either at the time of surgery for complications or at a latter date. (6)

The presence of H. Pylori infection should be assessed at the time of surgery and eradicated, which reduces the recurrence rate. (7)

Uncomplicated ulcers usually don't require surgical management due to the advent of medical therapy. Bleeding ulcers are usually managed by endoscopic procedures and surgeon's role comes in perforated peptic ulcers. (8)

## CONCLUSION:

In our study antral ulcer perforations were more common followed by body of stomach perforations and pre-pyloric perforations. There was an increase in incidence of perforations in body of the stomach than historically seen and this increase was commonly seen in elderly population. This change in trend may be due to change in etiological factors and should be further investigated.

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