

Clinical Profile and Upper Gastrointestinal Endoscopy Findings in Patients with Acid Peptic Disease.

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ABSTRACT

Background: Acid Peptic Diseases (APD) is a common disorder. Population based survey revealed that 44% of the population reported monthly heartburn and 19.8% suffered from heartburn or acid regurgitation at least once a week. Endoscopy is the most sensitive diagnostic test for peptic ulcers. In this study, we are going to study the clinical features and upper gastrointestinal endoscopy findings in patients presenting in our centre in order to come to a precise diagnosis. **Methods:** Upper gastrointestinal endoscopy will be performed by faculty members in all study subjects as a primary diagnostic investigation and interpretation of the findings as observed by a single observer was noted. **Results:** Most common finding in endoscopy in oesophagus was erosions in 15% (15) of cases which varied from mild, moderate to severe erosions. This was followed by erythema, ulcers and hiatus hernia 6% of cases (6 each). Barrett's oesophagus was seen in 3% of total cases (3). Carcinoma and varices was found in 1 case each. Lax OG junction was found to be in 36% (36) of the patients. Endoscopic findings of stomach shows varies lesions seen during gastroscopy in which 15% (15 cases) had Erosions, 7% (7 cases) had severe circumferential erosions, 5% (5 cases) had gastric ulcers. Erythema, growth at pylorus and polyp was seen in 2% (2 cases) each. **Conclusion:** Need to provide awareness regarding endoscopy diagnostic technique for patients with prolonged APD, so that it will aid to provide appropriate treatment.

Keywords: Acid Peptic Disease, Endoscopy.

INTRODUCTION

Acid peptic disease is a collective term used to include many conditions such as gastro esophageal reflux disease (GERD), gastritis, duodenitis, esophageal ulcer, gastric ulcer, duodenal ulcer, Zollinger-Ellison syndrome and other hypersecretory states.

GERD patients present with symptoms of epigastric pain, heartburn, pharyngeal burning and regurgitation of gastric contents, acidic taste and dysphagia.^[1,2] An overall prevalence of 25%, during the preceding three months, is estimated to be a reasonable average for GERS (gastroesophageal reflux symptoms) in the international literature.^[3] The prevalence of PUD during 1940-1965 varied in different studies between 1-15%.^[4] GU, especially in women, was the most common type of PUD in the 19th century, whereas DU was rather rare.^[5]

Acid Peptic Diseases (APD) is a common disorder. Population based survey revealed that 44% of the

population reported monthly heartburn and 19.8% suffered from heartburn or acid regurgitation at least once a week. An approximate prevalence of 10–20% was identified for GERD, in the Western world while in Asia this was lower, at less than 5%.^[2,6]

Careful history taking allows accurate differential diagnosis of acid peptic disease in only about half of patients. In the remainder endoscopy can be a useful diagnostic tool, especially in those patients whose symptoms are not resolved by an empirical trial of symptomatic treatment.

The development of endoscopy methods, which started in 1935, has become the major investigational method also in epidemiological research first after development of flexible fiber optic Instruments in the 1960s.^[7] Endoscopy is the most sensitive diagnostic test for peptic ulcers.^[8] The main role of endoscopy in patients with uncomplicated peptic ulcer disease is to diagnose, identify lesions too small to be detected by radiographic examination and to rule out helicobacter pylori infection and malignancy by performing endoscopic biopsy.^[9]

In this study, we are going to study the clinical features and upper gastrointestinal endoscopy findings in patients presenting in our centre in order to come to a precise diagnosis.

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MATERIALS AND METHODS

This prospective study was conducted in the Department of General Surgery, Government Medical College/General Hospital, Anantapuramu during period of two years (August 2015 to July 2017). A total of 100 patients were included in this study after they satisfy the inclusion and exclusion criteria. Written and informed consent had taken from all the participants before doing this study.

Inclusion criteria

Patients above 20 years of age, male/female, having single or multiple symptoms mentioned below:

1. Heartburn,
2. Acid reflux,
3. Pain in upper abdomen, persisting for more than 2 weeks duration.
4. In any form of upper gastrointestinal bleed suspected clinically to be due to peptic ulcers.
5. In patients with recurrent symptoms of dysphagia.

Exclusion criteria

1. Acute abdominal conditions requiring immediate surgery.
2. Medically unstable patients.
3. Unwilling patients.
4. Patients with bleeding disorders.
5. Patients on anticoagulation therapy.

All patients included in this study were evaluated by detailed history, general examination and clinical findings, basic investigations; Specific investigations - ultrasonography of abdomen and pelvis, chest x-ray, barium studies, electrocardiogram was done, as and when required to further evaluate the patient condition and noted.

Upper gastrointestinal endoscopy will be performed by faculty members in all study subjects as a primary diagnostic investigation and interpretation of the findings as observed by a single observer was noted. The Biopsy of the upper gastrointestinal tract will be performed on patients by the standard technique using endoscope under local anaesthesia with absolute aseptic precautions after obtaining the consent from the patients.

RESULTS

In this study, mean age of the study population is 44 years with minimum age being 21 years and maximum 70 years. Out of the total 100 patients examined 75% of patients were between 21-50 years of age with maximum 33% of patients between 41-50 years of age. In this study we found 63 (63%) males and 37(37%) female patients.

The most common symptom at presentation was epigastric pain seen in 77% of patients (77 cases), followed by retrosternal burning sensation seen in 41% of patients (41 cases) and acid reflux seen in 39% of patients (39 cases). Dyspepsia vomiting and bloating sensation were seen in 38%, 18% and 19% of patients respectively [Table 1].

Table 1: Clinical profile of study population.

Symptoms	No. of Patients	Percentage
Epigastric pain	77	77%
RSB	41	41%
Dyspepsia	38	38%
Dysphagia	9	9%
Bloating Sensation	19	19%
Acid Regurgitation	39	39%
Vomiting	18	18%
Haemetemesis	6	6%
Malena	4	4%
Weight loss	6	6%

Duration of symptoms was assessed, maximum number of patients having symptoms for a period of 2 weeks to 3 months i.e., 50% [Figure 1].

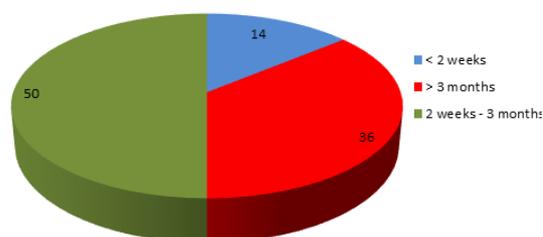


Figure 1: Duration of Acid Peptic disease symptoms.

Most common finding in endoscopy in oesophagus was erosions in 15% (15) of cases which varied from mild, moderate to severe erosions. This was followed by erythema, ulcers and hiatus hernia 6% of cases (6 each). Barrett’s oesophagus was seen in 3% of total cases (3). Carcinoma and varices was found in 1 case each. Lax OG junction was found to be in 36% (36) of the patients [Table 2].

Table 2: Endoscopic findings in Oesophagus.

Endoscopic findings in Oesophagus	No. of Patients	Percentage
Barrett’s Oesophagus	3	3%
Erosions	15	15%
Erythema	6	6%
Ulcers	6	6%
Growth at LE	1	1%
Hiatus Hernia	6	6%
Lax OG Junction	36	36%
Varices	1	1%
Total	75	75%

Table 3: Endoscopic findings in Stomach

Stomach	Frequency	Percentage
Erosions	15	15%
Erythema	2	2%
Growth at Pylorus	2	2%
Multiple Ulcers	5	5%
Polyp in Antrum	2	2%
Svrcircumferential erosions	7	7%
Total	33	33%

Endoscopic findings of stomach shows varies lesions seen during gastroscopy in which 15% (15 cases)

had Erosions, 7% (7 cases) had severe circumferential erosions, 5% (5 cases) had gastric ulcers. Erythema, growth at pylorus and polyp was seen in 2% (2 cases) each [Table 3].

A Total of 13 cases had lesions in duodenum among which 10 cases had erosions, 2 cases had duodenitis and 1 case had erythema of duodenal mucosa [Table 4].

Table 4: Endoscopic findings in Duodenum

Endoscopic Findings in Duodenum	No. of Patients	Percentage
Svr.Duodenitis	2	2%
Erosions	10	10%
Erythema	1	1%

Out of the total 100 cases that were subjected to endoscopy 23% (23 cases) had severe form of disease with ulcers and circumferential erosions, 27% (27 cases) had moderate form of disease and 18% (18 cases) had mild variety of APD, erythema and mucosal edema. Around 25% (25 cases) had no findings in endoscopy.

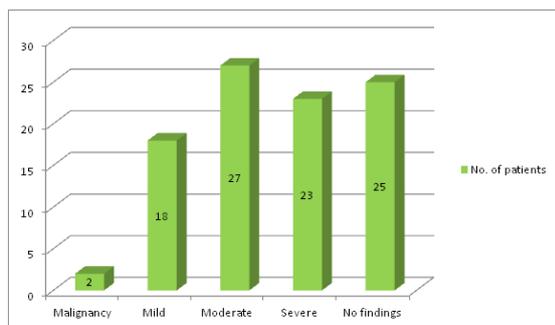


Figure 2: Grading of Acid Peptic Disease

DISCUSSION

Normally gastric acid and pepsin secretion is required for digestion of food. Excessive secretion of this acid and pepsin or a weakened stomach mucosal defence is responsible for damage to the delicate mucosa and the lining of the, oesophagus, stomach and duodenum resulting in ulceration which is known as "Acid Peptic Disease".

Age distribution among the 100 patients subjected to endoscopy over a period of 2 years with maximum i.e., 33% were in the 41-50 age group. In a study conducted in Minnesota by G. Richard Locke et al [10] all the prevalence of reflux was common in the age groups 25 -75 years.

Sex distribution where in 37 (37%) were female and 63 (63%) were male. In an endoscopic survey by Andrea Sbrozzi- Vanni et al,^[11] there were 179 males out of 300 patients which accounted to 60% males in the study and 40% female patients.

In this study majority of patients presented with epigastric pain 77%, followed by retrosternal burning 41% and acid reflux 39%. Rest of the symptoms were present in less than 50% of the

patients. Each patient presented with an average of 3-4 symptoms. In a study by G. Richard Locke et al,^[10] the prevalence for heart burn and acid regurgitation was 42.2% and 45% respectively. Heartburn and acid regurgitation are both considered to be specific symptoms for the diagnosis of GERD. In a series by Roar Johnsen et al,^[12] of the 309 subjects with dyspepsia, 125 (40.5%) reported having epigastric pain, of whom 64 (51. 2%) reported having no simultaneous heartburn, 142 (58%) had heartburn without abdominal pain, and 61 (24.9%) had both heart burn and epigastric pain.

In this study the Prevalence of various findings in endoscopy was evaluated. GERD was seen in 27%, peptic ulcer 6%, Gastritis 13%, Hiatus hernia 6%, Esophago-gastritis 7%, Barrett's esophagus 3%, malignancy 3%, Polyp 2%. No findings in endoscopy were seen in 25%. In a population based survey in Sorreisa, Norway by Roar Johnsen et al.^[12] Oesophagitis was observed in 12% (33) of total 273 patients with dyspepsia, hiatus hernia in 3.3% (9), Gastritis in 20% (55), Peptic ulcer disease in 8.4 % (23) of patients and normal endoscopy was seen in 53.5 % (146) of patients .

A study on endoscopic findings among dyspeptic patients in UBTH, Benin city, Nigeria by Rose Ashinedu et al,^[13] showed 45.6% (220) had gastritis, 13.7% (82) showed esophagitis, 8.5% (51) had duodenal ulcer and 1.7 % had gastric cancer. 1 % (6), 0.7% (4) and 0.5% (3) accounted for esophageal candidiasis, gastric polyp and esophageal cancer respectively. Normal findings constitute 15.4% (92/59) of the patients undergoing endoscopy.

CONCLUSION

The present study showed epigastric pain as the commonest finding for the duration of 2 weeks to 3 months. Acid peptic disease was common in males with preponderance in the age group of 41-50 years. Patients underwent oesophagogastroduodenoscopy most common finding in endoscopy in esophagus was erosions in 15% (15) of cases which varied from mild, moderate to severe erosions. Lax OG junction was found to be in 36% (36) of the patients. Need to provide awareness regarding endoscopy diagnostic technique for patients with prolonged APD, so that it will aid to provide appropriate treatment.

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