



CASE STUDY

AN AUDIT OF VARIOUS ENDOSCOPIC FINDINGS IN PATIENTS PRESENTING WITH NON-SPECIFIC ABDOMINAL PAIN

***Arvind Ramachandran, Bhaskaran A. and Asadulla Biag**

Department of General Surgery, SDUMC, Kolar

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ABSTRACT

Introduction: One of the most common presentation of patients presenting to surgical OPD is heart burn or non specific abdominal pain. Over the years endoscopy has proven to benefit and aid in diagnosing the definitive causes of such clinical presentation. Among them those frequently encountered include GERD, biliary gastritis, reflux esophagitis and in some instances malignancy of upper GI tract can be diagnosed.

Objectives: To retrospectively analyse the most common endoscopic finding in patients presenting with non specific abdominal symptom undergoing upper gastrointestinal endoscopy.

Clinical data and findings of patients who have undergone upper gastrointestinal endoscopy in the past 3 years will be collected through departmental records.

Results: A total of 1406 endoscopies were performed from the period comprising 2013-2015.

A diverse range of etiologies were found 922 males comprised the study population while the female population included 484 patients with a male: female ratio of 1.9:1. Antral gastritis as an endoscopic finding was most common among the list of diagnosis and was seen in 275 patients of which the male population was 194 and female were 81.

Endoscopy was normal in 643 patients belonging to the study population.

The number of endoscopies performed in 2013 were 392 (28% of study population), 2014 -501 (36% of study population) and 2015-513 (36% of study population).

Conclusion: The only clinical symptoms which patients present with are heart burn or abdominal pain of non-specific etiology. By performing an endoscopy the exact cause and the nature of condition can be deduced which aids the clinician in planning the appropriate treatment as demonstrated in this particular study.

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INTRODUCTION

One of the most common presentation of patients presenting to surgical OPD is heart burn or non specific abdominal pain. Over the years endoscopy has proven to benefit and aid in diagnosing the definitive causes of such clinical presentation. Among them those frequently encountered include GERD, biliary gastritis, reflux esophagitis and in some instances malignancy of upper GI tract can be diagnosed. Gastroesophageal reflux disease includes the whole spectrum of reflux disease, from intermittent symptoms like heartburn or acid regurgitation to endoscopic reflux esophagitis and Barrett's esophagus. Dyspepsia is a common condition that is reported by up to 40% of the general population. (Vakil *et al.*, 2006) Gastric polyp histology cannot be reliably distinguished by endoscopic appearance; therefore, biopsy is warranted when polyps are detected. The majority of gastric epithelial polyps are fundic gland polyps or hyperplastic polyps and are often incidental findings on endoscopy. (Gencosmanoglu *et al.*, 2003) Early gastric cancer (EGC) is defined as invasion

con-fined to the mucosa or submucosa, regardless of the presence of regional lymph node metastasis (Japanese Gastric Cancer Association, 1998) Bile reflux gastritis is due to an excessive reflux of bile, pancreatic and intestinal secretions into the stomach. (Cohen *et al.*, 2006) The increased enterogastric reflux may provide the basis for increased mucosal injury. Alkaline reflux gastritis can appear in two circumstances: gastric resection with ablation of pylorus and primary biliary reflux due to the failure of pylorus (Keren *et al.*, 2011). Endoscopy is easily learned and rapidly carried out, can be a more informative and cost-effective in assessing non-specific abdominal pain and aids in early treatment of the underlying condition.

Objectives: To retrospectively analyse the most common endoscopic finding in patients presenting with non specific abdominal symptom undergoing upper gastrointestinal endoscopy.

MATERIALS AND METHODS

Clinical data and findings of patients who have undergone upper gastrointestinal endoscopy in the past 3 years will be

collected through departmental records. This will be retrospective study which will include the following parameters

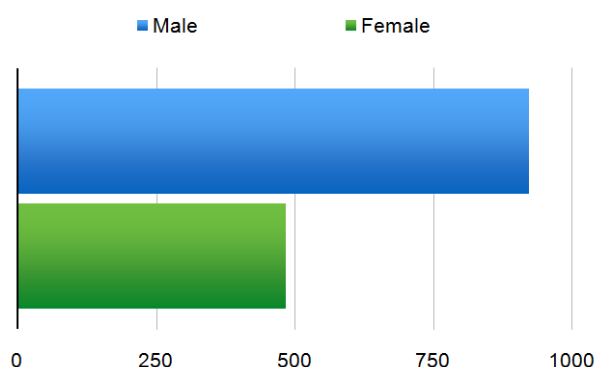
- Age
- Gender
- Presenting symptom
- Previous symptoms similar
- Associated symptoms
- Duration of symptoms
- Endoscopic finding.

RESULTS

A total of 1406 endoscopies were performed from the period comprising 2013-2015.

Demographic Data			
S.Number	Diagnosis	Patients	Percentage
1	Antral gastritis	275	19.6%
2	diffuse gastritis	95	6.75%
3	Gastro oesophageal reflux disease	92	6.54%
4	biliary gastritis	94	6.68%
5	severe gastritis	52	3.7%
6	erosive gastritis	22	1.6%
7	reflux biliary gastritis	22	1.6%
8	oedematous pylorus	12	0.85%
9	nodular gastritis	2	0.14%
10	Carcinoma stomach	68	4.83%
11	Carcinoma oesophagus	5	0.35%
12	Oesophageal varices with duodenal ulcer	4	0.28%
13	Oesophageal varices with biliary gastritis	3	0.21%
14	Grade II hiatus hernia	5	0.35%
15	grade II oesophageal varices	12	0.85%
16	Normal study	643	45.7%
	TOTAL	1406	

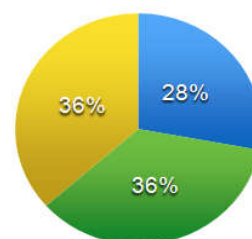
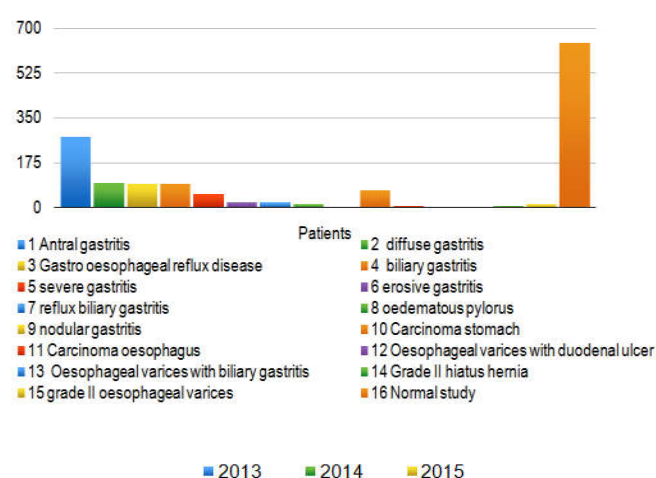
A diverse range of etiologies were found 922 males comprised the study population while the female population included 484 patients with a male: female ratio of 1.9:1.



Antral gastritis as an endoscopic finding was most common among the list of diagnosis and was seen in 275 patients of which the male population was 194 and female were 81.

- The next most common diagnosis was diffuse gastritis seen in 95 patient among the study population
- Gastro oesophageal reflux disease seen among 92 patients, biliary gastritis was noted in 94, severe gastritis in 52, erosive gastritis in 22, reflux biliary gastritis was noted in 22, oedematous pylorus was seen in 12 patients, nodular gastritis was seen in 2 patients.

- Carcinoma stomach which was noted mostly as an ulceroproliferative growth at various regions of the stomach was seen in 68 patients which was confirmed by biopsy. Carcinoma oesophagus was seen in 5 patients.
- Oesophageal varices with duodenal ulcer was seen in 4 patient, Oesophageal varices with biliary gastritis was seen in 3 patients.
- 5 among the study population were diagnosed to have Grade II hiatus hernia and 12 patients had grade II oesophageal varices.
- Endoscopy was normal in 643 patients belonging to the study population.
- The number of endoscopies performed in 2013 were 392 (28% of study population), 2014 -501 (36% of study population) and 2015-513 (36% of study population).



DISCUSSION

In this study, there were more males than females; ratio is 1.9:1 similar to findings in majority of other countries, probably because UGI tract diseases are more prevalent in males. Olokaba *et al* noticed a male to female ratio of 1.05. More male to female ratio was also reported by Adulful *et al* in Accra, Ghana and similar studies of AgbaKwuru *et al*, Danbanauch *et al*, in Zaria, North West Nigeria. Emmanuel jeje *et al*, also reported more male preponderance. A study conducted at Multan by Muhammad Innayatullah *et al* shows more of malepreponderance (50.6 % Males Vs. 49.4 % Females). In the study conducted at Peshawar had an almost equal number of males and females, however Nkrumah *et al* in Saudi Arabia and Khurram *et al* in Pakistan noticed more females as compared to males in their studies, probably more females are being referred in the centres for endoscopy. The age pattern is closely similar to those of other studies with very few presenting before the age of 20years, peaking in the fifth decade and a mean age of 43.45years (SD +15.343) probably

because UGI tract diseases are prevalent in the older population age group and in the study by Emmanuel jeje *et al.* We noticed antral gastritis, being commonest indication for UGI Endoscopy in our study. This is similar to Malu *et al* (78.1 %) in their study at Zaria and so did Danbauchi *et al*, Aduful *et al*, Nkrumah *et al.* A study from India reported antral gastritis in 59% of patients undergoing OGD. In our study normal Endoscopy was reported in 45.7% (n=643) which is not consistent with the result of study by Khalid Mahmud *et al* Abnormal OGD was more common in patients above 40 years as compared to Gastritis was common in 25.1% in concordance with findings of Emmanuel jeje *et al* and 31% by Nkrumah in Saudi and 35% obtained by Agbakwuru *et al* at Ife, Nigeria, which is less as compared to our study. Study from Saudi Arabia reported antral gastritis to be the commonest gastroscopy finding Almost similar percentage was reported at Multan. This may be due to H.Pylori infection reported in patients with dyspepsia in an earlier study from Multan. We based our diagnosis on gross appearance of gastric mucosa. Other important causes of dyspepsia included Esophagitis, which was less as compared to the study which reported of cases. Duodenitis was reported in 5.1% cases which was similar to the study done by Khalid mahmood *et al* and was comparable to 27% in the study done by Emmanuel *et al*, 24.85% by Malu and Zaria, Nagerea and 16% by Agba Kwaru. We reported the percentage of diffuse gastritis as 6.7% who underwent OGD for dyspepsia. In this study mean age was 45 years supporting the view that in India these diseases occur at an earlier age. Gastric carcinoma was reported in 4.8 % similar to percentage of gastric carcinoma reported by Emmanuel jeje *et al* and esophageal carcinoma in 0.25%, which is less as compared to Emmanuel jeje *et al* which is 1.7%. Our findings were significantly high as compared to the percentage as reported by Khalid Mahmood and Muhammad Inayatullah *et al.* Gastric carcinoma reported by Agbakwuru which is 11.6% was similar to the findings noted in Nigeria, parts of Africa and other parts of the world. The overall percentage of gastro-esophageal malignancy (8.7%) was found in our study in patients of dyspepsia was similar to the percentage as reported by Shah *et al* (10%). The alarming symptoms were less clear in the studied population with a high incidence of gastro esophageal malignancy. Similar observations were noted by Sung *et al*, therefore proper history and physical examination followed by selected investigations should be a rule in dyspeptic patients to confirm or exclude serious disease. The incidence of upper GI malignancy is on the rise local and in the international scenario.

The miscellaneous pathologies were 3.5 % in our study as reported by Muhammad *et al* 7% and 14 % as reported by Shah *et al*. Correlations of Endoscopic diagnosis and with their personal habits as obtained which is highly significant. H. pylori status and history of drug intake was not available in

pour study. Furthermore patients biopsy confirmation of gastro duodenal inflammation was done in small number of cases, these were the lacunae which needs rectification for the future analytic studies. Further prospective studies required to be conducted on the dyspeptic subjects so as to develop guidelines for management of dyspepsia. The endoscopic diagnosis was based on using combination of three endoscopic criteria standing out of the biliar reflux, erythema of the gastric mucosa associated or not associated with erosions and also the association for the most part of the cases with the presence of a favorable element (gastric or biliar surgery intervention). But, in practice the endoscopic diagnosis of this form of gastritis was broken by the accuracy absence of the used criterions.

Conclusion

The only clinical symptoms which patients present with are heart burn or abdominal pain of non-specific etiology. By performing an endoscopy the exact cause and the nature of condition can be deduced which aids the clinician in planning the appropriate treatment as demonstrated in this particular study.

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