Original Research Article

Single-Center Review of Appropriateness and Utilization of Upper GI-Endoscopy in Dyspepsia – A Retrospective study.

ABSTRACT:

Introduction: Upper GI Endoscopy is one among the most commonest tool used by gastroenterologists to define the etiology of dyspepsia. Is this the answer to all dyspeptic patients? This study tried to look over the appropriateness and utilization of endoscopy in a tertiary care hospital.

Aim of study: This study aimed to define the endoscopic findings in dyspesia and to see appropriate utilization of a resource which is easily available in a tertiary care settings.

Material & Methods: we used administrative data to identify 103 patients who were full filling ROME III criteria for dyspepsia aged ≥ 18 years who were subjected to Endoscopy. These Patients had attended outpatient department of Medical Gastroenterology and were subjected for UGI endoscopy.

Results: 103 dyspeptic patients were taken in our study. Among them sixty seven were males and thirty six were females. Majority were in the age group of 20-40yrs (n= 38). Thirty six were in age group of 40-60 yrs and twenty nine were in the age group of > 60 yrs. significant endoscopy findings were seen in 79% of patients, while as normal endoscopy or no endoscopic findings were seen in 21% of patients. Majority of patients (n = 55) had Erosive Gastritis on endoscopy which were treated tested for H Pylori testings and were treated accordingly.

Conclusion: These data suggests adequate appropriate use of current recommendations for endoscopy in the evaluation of dyspepsia patients has been applied to our patient cohort.

Keywords : Endoscopy+ Dyspepsia+ Gastritis

INTRODUCTION:

The term dyspepsia is used variably by health professionals to refer to a heterogeneous group of upper abdominal symptoms that may arise from numerous causes. Patients seldom use the term dyspepsia and describe their abdominal symptoms instead in terms of discomfort, pain, bloating, fullness, burning, or indigestion (1-4). The way a patient perceives and reports these symptoms is dependent upon a complex interplay of biologic variables, personality traits, social support mechanisms, coping strategies, culture and language (5-8). Dyspepsia is a common symptom in the community and more than one third experience the problem of indigestion in 6 months. Gastrointestinal (GI) disorders account for about 10% of all consultation with general practitioner and about half of them have dyspepsia. Despite the substantial decline in the prevalence of peptic ulceration over the past 20 years, the incidence of dyspepsia has remained constant. It poses a diagnostic & therapeutic challenge to the clinician. During the past two decades, the number of upper gastrointestinal endoscopy (UGIE) being performed has increased. This has resulted in long waiting list in many centers. The introduction of increasingly complex technologies in health sector makes it necessary to evaluate the procedures not only in terms of efficacy and cost, but also with regards to the appropriation of the procedure in clinical setting. The British society has laid guidelines for an early endoscopy in dyspeptic patients with alarm symptoms and for those above the age of 45 (9-11).Open access endoscopy is being currently resulting in high workload in endoscopy suite. There are no standard guidelines for performing UGI endoscopy in our population.

Material & Methods: This retrospective study was conducted at an independent, integrated health system in Pathankot, Punjab, serving a diverse population. For the purpose of the study, we used administrative data to identify 103 patients aged ≥ 18 years who were subjected to Endoscopy. These Patients had attended outpatient department of Medical Gastroenterology with dyspepsia and were subjected for UGI endoscopy, after a thorough clinical examination and recording of clinical details in a structured Data Base. All patients underwent EGD from June 2021 to June 2022. Patients were included if the primary indication for undergoing the EGD was dyspepsia, as defined by Rome III criteria. Rome III criteria defines dyspepsia as one or more of the following three symptoms for 3 months within the

first 6 months of symptom onset: postprandial fullness, early satiety and epigastric pain or burning.

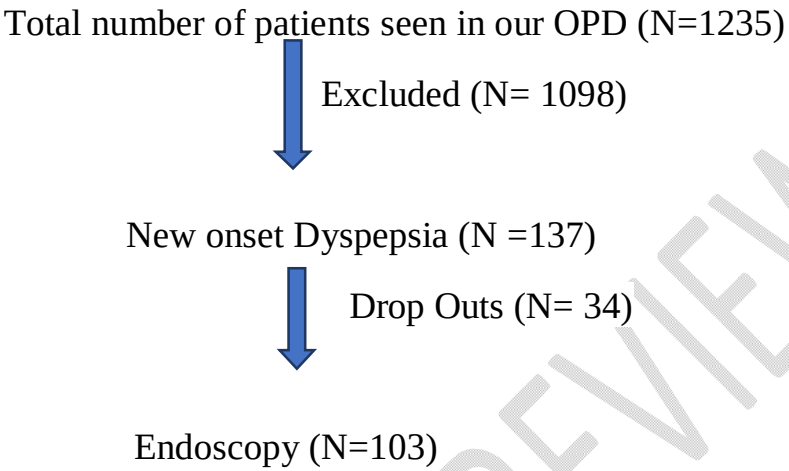

Chart 1 : Study protocol

EXCLUSION CRITERIA:

1. Retrosternal burning pain, which would suggest a more appropriate diagnosis of gastro-esophageal reflux disease (as per GERD questionnaire).
2. Progressive dysphagia and/or weight loss in the absence of epigastric pain.
3. Jaundice or history of pancreatic cancer.
4. Patients, in Whom Upper GI Endoscopy has been already done in past one year.

AIM OF THE STUDY:

1. To determine the outcome of endoscopy among dyspeptics with and without alarm symptoms.
2. Appropriateness of indications for diagnostic UGI endoscopy in association with relevant endoscopic disease.

RESULTS:

Results studied were:

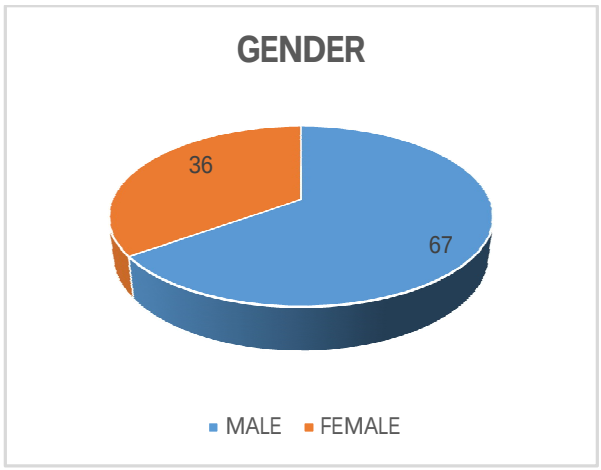

Figure 1: Gender Distribution of patients.

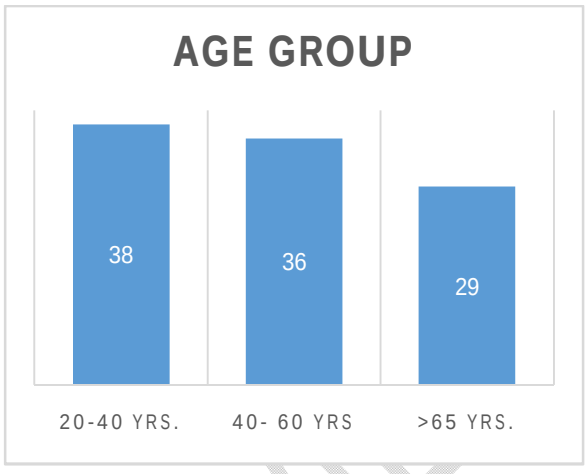

Figure 2: Age Distribution of Patients

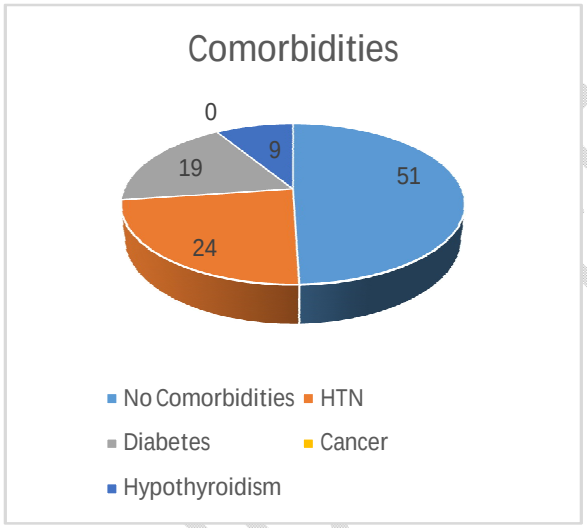

Figure 3: Comorbidities Seen in Patients.

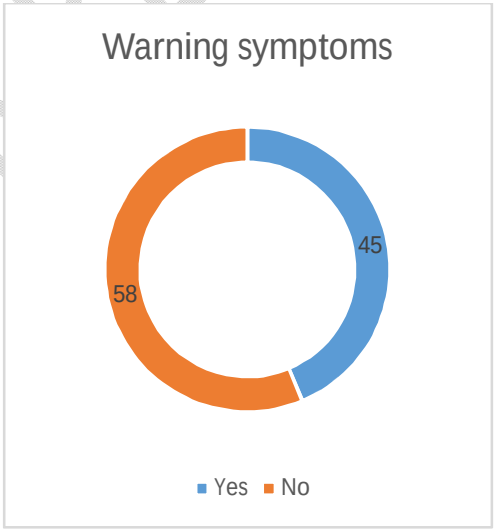

Figure 4: Presence/Absence of warning Symptoms & Signs in Patients.

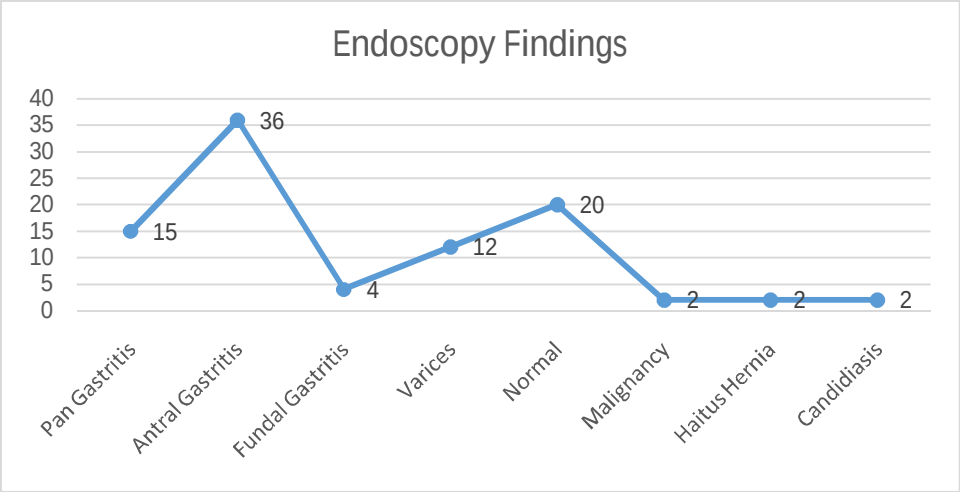

Figure 5: Endoscopy Findings in Studied Patients.

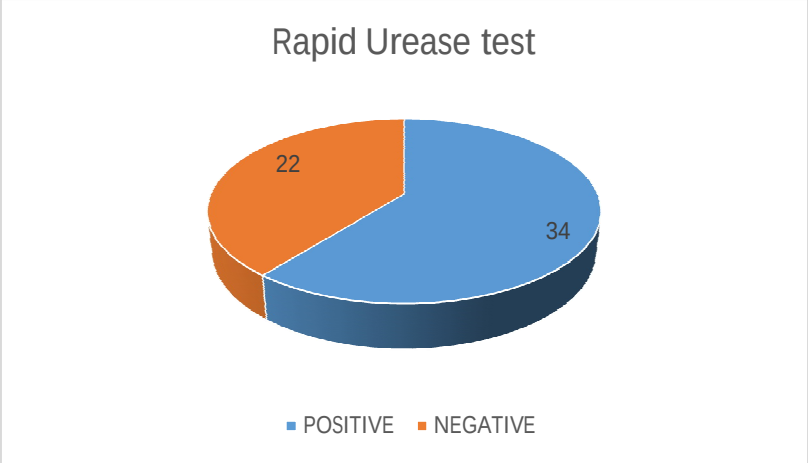

Figure 6: Rapid Urease Status in Patients.

DISCUSSION: Indication for endoscopy needs to be tailored according to the clinical presentation in dyspepsia. Individuals below the age of 35, in the absence of alarm symptoms can be managed with an empirical anti peptic therapy and reviewed at the end of 4 weeks. Persistence of symptoms should warrant an early endoscopy. Those with alarm symptoms require an endoscopy. On one hand, a normal endoscopy in dyspepsia cannot be readily dismissed as irrelevant. Reassurance provided by normal findings may subsequently result in symptom

relief, avoidance of unnecessary treatment and decreased consultation rate. But, on the other hand as almost three quarters of endoscopies performed were not guideline-based, so adding burden both on endoscopist as well as on Patients. So, selecting dyspeptic patients for endoscopy should be the primary concern for a gastroenterologist. In our studied Patients, minimal number of negative endoscopies were seen (N=20/103) and that too particularly in younger individuals & in those who have no alarm symptoms or signs. Further, adherence to the guidelines was lacking in testing for H. pylori, which was fairly prevalent in our population (12). Endoscopies performed according to the guidelines were significantly more likely to show abnormal endoscopy findings. But the interesting thing was found that a good number of patients (N=12/103) who were subjected to endoscopy have portal hypertension (varices) on endoscopy. H- Pylori Infection was seen in significant number of patients (N=55/103), directing us for what is phrased as "test & treat" policy (13-15). In those who have Rapid urease testing positive were given triple drug therapy for erradication of Helicobacter infection and most of them were symptom free after 6 weeks of therapy. We therefore, advise practitioners to adopt guidelines when evaluating patients with dyspepsia. Such practice would avoid unnecessary procedures, improve access to care and will result in an efficient utilization of Resources.

RECOMMENDATIONS:

1. We recommend initial endoscopy for new-onset dyspepsia in patients 50 years of age of older or those with alarm features.

2. We recommend that dyspeptic patients younger than 50 years of age and without alarm features undergo either an initial "test and treat" approach for H pylori or empiric therapy with a PPI, depending on the prevalence of H pylori infection in their population. For H pylori prevalence greater than 20%, "test and treat" is recommended.

3. We suggest that dyspeptic patients who are younger than 50 years of age, lack alarm features, and are H pylori negative may be offered a trial of PPI acid suppression.

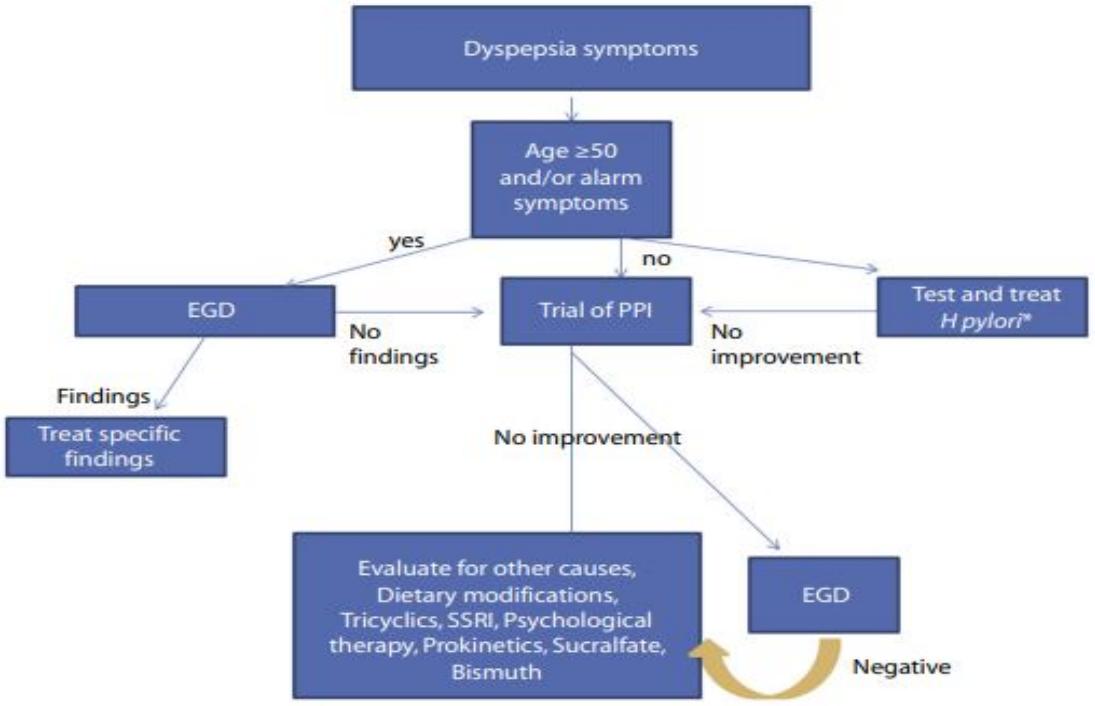

Image 1: Symptoms of dyspepsia

INTERPRETATIONS:

A high rate of high yield and aptness of use of invasive endoscopies were performed at this center in previous one year, although low yield was seen in younger age groups, particularly those who were having no warning signs & symptoms. These data suggests adequate appropriate use of current recommendations for endoscopy in the evaluation of dyspepsia patients has been applied to our patient cohort.

LIMITATIONS:

The limitations of the present study included a relatively small sample size and the small number of important endoscopic lesions that were found, resulting in a low power to detect any clinically significant differences. Secondly, we performed a retrospective analysis which may have imparted selection bias.

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