



**UPPER GASTROINTESTINAL ENDOSCOPIC FINDINGS OF PATIENTS PRESENTING
WITH DYSPESIA IN A TERTIARY CARE CENTRE OF EASTERN INDIA**

Sarkar K.^{*1}, Gonju D.², Pal S.³, Haldar S. N.⁴ and Pramanik N.⁵

^{1,2,3,4}Assistant Professor, Dept. of Tropical Medicine, School of Tropical Medicine, Kolkata.

⁵Associate Professor, Dept. of Tropical Medicine, School of Tropical Medicine, Kolkata.

***Corresponding Author: Dr. Sarkar K.**

Assistant Professor, Dept. of Tropical Medicine, School of Tropical Medicine, Kolkata.

Article Received on 24/04/2016

Article Revised on 14/05/2016

Article Accepted on 04/06/2016

ABSTRACT

Introduction: Upper gastrointestinal tract (UGIT) endoscopy is a safe and easily carried out procedure of high diagnostic value and also has therapeutic value in some cases. Patients with dyspeptic symptoms are generally referred for UGIT endoscopy, which is the reference standard for diagnosis. **Aim and Objective:** To categorize the reasons for referral for UGIT endoscopy and to determine the associated risk factors regarding dyspepsia. **Material and methods:** This institution based cross sectional study was conducted on consecutive hundred cases of patient with dyspeptic symptoms who attended the endoscopy clinic at the School of Tropical Medicine, Kolkata from January 2015 to January 2016. **Results:** The most commonly identified endoscopic findings were gastritis (54%), duodenitis(20%), hiatus hernia(16), duodenal ulcer(9%), gastric ulcer (4%). Gastric cancer was identified in 3 % of patients and all of them were aged 50 years and above. Endoscopy findings were normal in 16% patients. Among all patients 31 patients had mixed findings and few other findings (like polyp, esophagitis, esophageal Candidiasis, varix etc). Gastritis, GERD and PUD are the leading causes of dyspepsia. **Conclusion:** The upper gastrointestinal endoscopy has a high diagnostic value in the investigations of upper gastrointestinal symptoms.

KEYWORD: Upper gastrointestinal endoscopy, dyspepsia.

INTRODUCTION

Dyspepsia is a common presenting complaint of different anatomic or functional disorders of various upper gastrointestinal disorders.^[1-3] Dyspepsia is a syndrome, characterised by a variety of symptoms including epigastric discomfort, bloating, anorexia, early satiety, belching or regurgitation, nausea and heartburn. Rome III criteria define dyspepsia as 1 or more of the following 3 symptoms for 3 months within the initial 6 months of symptom onset: (1) postprandial fullness, (2) early satiety, and (3) epigastric pain or burning.^[4] The etiologies of dyspepsia are many and the major ones are gastroduodenitis, PUD, malignancies, esophagitis, parasitic infestations, and functional dyspepsia.^[5] According to Tytgat, 2002; Kibiki et al., 2006, the distribution of these upper gastrointestinal lesions varies significantly in different countries and within geographic locations in the same nation. Patients with uncomplicated dyspepsia often have minor or no detectable gastroduodenal lesions as seen on conventional UGIT endoscopy. Approximately 40% of dyspeptic patients have some organic cause and only 20% of patients with dyspepsia have significant gastro-duodenal lesions, such as peptic ulcer. Guidelines for the management of dyspepsia therefore recommend UGIT endoscopy to detect higher risk of harbouring serious UGI lesions.^[6] The objective of the present study was to determine the

reasons for referral for UGIT endoscopy and to determine the associated risk factors.

MATERIALS AND METHODS

It was an institutional based cross sectional study was conducted on consecutive hundred cases of patient with dyspeptic symptoms who attended the endoscopy clinic at the School of Tropical Medicine, Kolkata. The exclusion criteria were age less than 15 years and having known chronic liver disease and those patients not willing to give consent. Thorough history was taken and systemic examination was done. Upper GI endoscopy was performed by experienced endoscopist. Biopsy was taken in suspected malignant lesions. The data's were recorded in a predesigned case data sheet. After data collection, it was analysed by appropriate statistical software (MedcalcR version 9).

RESULTS

Out of 100 patients, 56% were males and 44% were females with male: female (1.27: 1). The age range of patients was from 17 to 70 years. Seventy eight patients, were in the age group of 30-50 years. Among the study population commonly identified endoscopic findings were gastritis (54%), duodenitis(20%), hiatus hernia(16), duodenal ulcer(9%), gastric ulcer (4%). Gastric cancer was identified in 3% of patients and all of them were

aged 50 years and above. Endoscopy findings were normal in 16% patients. Among all patients 31 patients had mixed findings and 6% had other findings (like polyp, esophagitis, esophageal Candidiasis, varix etc).

Table 1: Distribution of endoscopic findings in patients with dyspepsia (N=100) (Some patients had two or more endoscopic findings).

Endoscopic findings	Number of cases	Percentage
Gastritis	54	54%
Duodenitis	20	20%
Hiatus hernia	16	16%
Duodenal ulcer	9	9%
Gastric ulcer	4	4%
Gastric cancer	3	3%
Other findings	6	6%
Normal	16	16%

Most of the patient (58%) presented with abdominal bloating sensation with regurgitation of food materials. The other presenting symptoms were heartburn in 40%

cases, epigastric discomfort or pain in 31% cases, nausea or vomiting in 28% cases, flatulence in 26% cases, dysphagia in 3% cases as shown in Table 2.

Table 2: Presenting symptoms (N=100) (Some patients had two or more endoscopic findings).

Endoscopic findings	Number of cases	Percentage
Abdominal bloating sensation with regurgitation of food materials	58	58%
Heartburn	40	40%
Epigastric discomfort or pain	31	31%
Nausea or vomiting	28	28%
Flatulence	26	26%
Dysphagia	3	3%

Most of the male patients were smokers (52%). Ninety-six percent of the patients were taking tea. Other common habits were snuff (60%) - in both male and female, alcohol intake (26%) and spicy meals (80%). Some patient also give history of prolong empty stomach, non-steroidal anti-inflammatory drugs (NSAIDs) use and anxiety.

DISCUSSION

Endoscopy is the gold standard for diagnosis of gastro intestinal diseases worldwide.^[7] In resource limited settings, especially when access to endoscopy service is limited, it is very important for clinicians to know common causes of dyspepsia which is a major health problem worldwide especially in developing countries like India where it put financial burden on national economy. In England and Wales-the prescription for dyspepsia now account for over 10% of primary care, numbering 471million in 1999.^[8]

In our study, most of the dyspeptic patients (84%) had organic causes which were diagnosed with endoscopy. This is consistent with the findings of the studies done in Ethiopia (Asrat *et al.*, 2004) and Nigeria (Mustafa *et al.*, 2007) where organic causes of dyspepsia were documented in 96.4% and 82.1% of dyspeptic patients, respectively. However, our finding differs from that of (Tytgat *et al.* 2002) where meta-analysis of 22 studies

from the developed countries showed abnormal endoscopic findings in only 51% of dyspeptic patients. The differences may be attributed to how patients were selected and in the inclusion and exclusion criteria used in different studies (Marshall & Winsdor, 2005), differences in socioeconomic status, food habit, and health care seeking behavior. However, the 1:2.2 ratio of gastric to duodenal ulcers is inconsistent with the findings of 1:6.1 from previous publications.^[9, 10] The present study had a normal endoscopic finding in 16% cases, which is also correlate with the studies reporting values of 20–50%.^[11] Dyspepsia with no evidence of organic disease is termed non-ulcer or functional dyspepsia.^[12- 15] Lastly the present study confirms that gastro-duodenitis, peptic ulcer disease, GERD and gastric cancer are the most common aetiologies of dyspepsia.

Limitations of the present study included a relatively small sample size and hence a small number of important lesions and tests for *H. pylori* infection were not available in our institute.

CONCLUSION

Upper gastro intestinal endoscopy has a high diagnostic value in the investigations of dyspepsia and upper gastro intestinal symptoms. Most of the dyspeptic patients

(84%) had organic causes which were diagnosed with endoscopy.

ACKNOWLEDGMENTS

I am thankful to Prof. N. Basu, Director, School of Tropical Medicine, Kolkata, for allowing me to work in this institution and extending valuable help when needed. I must express my deepest gratitude to Prof. R. P. Goswami, Dr. M. Rahman of Department of Tropical Medicine, School of Tropical Medicine, Kolkata.

REFERENCES

1. Holtmann G, Stanghellini V, Talley NJ. Nomenclature of dyspepsia, dyspepsia subgroups and functional dyspepsia: clarifying the concepts. *Baillieres Clin Gastroenterol*, 1998; 12: 417-33.
2. Rabeneck L, Wray NP, Graham DY. Managing dyspepsia: what do we know and what do we need to know? *Am J Gastroenterol*, 1998; 93: 920-4.
3. Stanghellini V, Tosetti C, Barbara G, et al. Management of dyspeptic patients by general practitioners and specialists. *Gut*, 1998; 43(Suppl 1): S21-3.
4. Tack J, Talley NJ. Functional dyspepsia—symptoms, definitions and validity of the Rome III criteria. *Nat Rev Gastroenterol Hepatol*, 2013; 10: 134-41.
5. Segni m. Ayana1*, birgitta swai2, venance p. Marol and gibson s. Kibiki1,3. Upper gastrointestinal endoscopic findings and prevalence of helicobacter pylori infection among adult patients with dyspepsia in northern tanzania. *Tanzania journal of health research*. Volume 16, number 1, january 2014.
6. Choomsri P, et al. Upper Gastrointestinal Endoscopy Findings in Patients Presenting with Dyspepsia. *The THAI Journal of SURGERY*, 2010; 31: 7-12.
7. Lambert R. Digestive endoscopy: relevance of negative findings. *Ital-J-Gastroenterol-Hepatol.*, 1999 Nov; 31(8): 761-772.
8. Ahmed J, Haider SI, Choudri AN, Dyspepsia in arural Cohort. *J Coll physicians Surg Pak*, 2004; 14: 91-3.
9. Aduful H, Naaeder S, Darko R, Baako B, Clegg-Lampsey J, Nkrumah K, et al. Upper gastrointestinal endoscopy at the korlebu teaching hospital, accra, ghana. *Ghana Med J.*, 2007; 41(1): 12-6.
10. Adam G, Yorke J. *Pan Afr Med J.*, 2014; 18: 327. Published online 2014 Aug 25. doi: 10.11604/pamj.2014.18.327.4806 PMID: PMC4250021.
11. Stephen Tabiri1*, Akanbong Prosper2 and Atiku Adam2. Upper gastrointestinal endoscopic findings in patients presenting to Tamale Teaching Hospital, Ghana. *Unified Journal of Medicine and Medical Sciences*, October, 2015; 1(2): 006- 011.
12. The American Gastroenterological Association. American Gastroenterological Association medical position statement: evaluation of dyspepsia. *Gastroenterology*, 2005; 129: 1753-55.
13. Tack J, Talley NJ, Camilleri M, Holtman G, Hu PJ, Malagelada JR, Stanghellini V. Functional gastroduodenal disorders. *Gastroenterology*, 2006; 130: 1466-79.
14. Ruge M, Meggio A, Pennelli G, et al. Gastritis staging in clinical practice: the OLGA staging system. *Gut*, 2007; 56: 631- 6.
15. Talley NJ, Phung N, Kalantar J. Indigestion: when is it functional? *Br Med J*, 2001; 323: 1294-7.