

Endoscopic Evaluation of New Onset Dyspepsia in the Elderly

B.P. Chakravarty*, N. Mahanta**, S. Dutta**, I. Hazarika#, S. Islam#

Abstract

Aim: To ascertain the role of upper gastrointestinal endoscopy in elderly individuals with new onset dyspepsia.

Material and Methods: A prospective study was carried out in elderly patients sixty years and above who presented with new onset dyspepsia using upper gastrointestinal endoscopy. Seventy five patients were enrolled in the study, fifty eight males and seventeen females with exclusion of patients with documented gastrointestinal disease.

Results: Endoscopic evaluation in elderly with new onset dyspepsia revealed gastroesophageal malignancies in twenty one patients (28%), peptic ulcer disease in thirty nine patients (52%), while fifteen patients (20%) had normal endoscopic studies.

Conclusion: New onset dyspepsia in elderly is associated with significant underlying gastrointestinal diseases and majority had associated alarm symptoms. Endoscopic evaluation of elderly patients with new onset dyspepsia, where the facility is available, is an important aid to unravel underlying significant gastrointestinal disease.

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Introduction

Dyspepsia is defined as a constellation of symptoms that include upper abdominal pain or discomfort, which is intermittent or constant and may be associated with additional symptoms of nausea and vomiting. Although these symptoms may be associated with a wide range of specific clinical diagnoses (peptic ulcer disease, gastric cancer, and gastroesophageal reflux among others), often no organic cause can be found (functional dyspepsia). Endoscopic examination of the upper gastrointestinal tract remains the "gold standard" initial approach in the management of patients with dyspepsia because of its ease, reliability, diagnostic superiority, and the ability it gives the endoscopist to perform biopsies and/or therapeutic interventions.¹

According to the American Gastroenterological Association guidelines for the evaluation of dyspepsia, referral for early upper endoscopy is always indicated in older patients presenting with new-onset dyspepsia.²

However, this is generally not practical because of the cost and availability especially in resource constraint country like ours.

The present study was undertaken with the objective to determine the frequency of significant disease diagnosed by upper endoscopy in the elderly (i.e 60 years and above) with new-onset dyspepsia.

Material and Methods

The study was conducted prospectively in the Department of Medicine, Guwahati Medical College Hospital, from June 2004 to June 2005. All patients of age 60 years and above who presented with symptoms of new-onset dyspepsia (i.e. dyspepsia of recent onset (<1 year), of at least 4 weeks duration), were screened for enrolment into the study. Dyspepsia was defined as pain or discomfort centered in the upper abdomen (Rome II definition).¹⁷

*Professor & Head, ** Assistant Professor, # Post Graduate, Department of Medicine, Guwahati Medical College and Hospital, Bhangagarh. Guwahati-32.

Address for correspondence:
Dr Neelakshi Mahanta,
Assistant Professor, Department of Medicine
Guwahati Medical College and Hospital, Bhangagarh,
Guwahati-32.

Exclusion criteria were:

1. Patient with past documented peptic ulcer or oesophagitis.
2. Patient with hepato-biliary and pancreatic disorders.
3. Patient who had undergone gastric surgery.
4. Patient with overt gastrointestinal bleed.
5. Seriously ill patient.

All patients were interviewed immediately before the endoscopy. The interview provided information on demographic data, medical and drug history and present symptoms. The patients were questioned regarding the presence of "alarm symptoms" i.e. unexplained weight loss, anorexia, early satiety, recurrent vomiting, progressive dysphagia and bleeding.³

All endoscopies were carried out by experienced endoscopists.

Esophagitis was defined as mucosal breaks extending proximally from the squamocolumnar junction, whether ulceration was present or absent.⁴

Peptic ulcer was defined as a mucosal break in the stomach, duodenum, or both, greater than 5 mm in diameter.

Diagnosis of upper GI cancers were confirmed histopathologically.

Significant disease was defined as the presence of esophagitis, erosions, peptic ulcer, gastric or esophageal cancer or a combination of any of these.⁵

Results

A total of 92 patients were screened for inclusion into the study. Of these 15 patients were excluded as they had either previous documentation of peptic ulcer disease or esophagitis and/or were taking empirical treatment for dyspepsia. Two patients were excluded as they refused to give consent for endoscopy. In the final analysis, 75 patients were included in the one-year period of the study. The mean age of the study group was 65.6 ± 3.4 years (range 60-85 years). The demographic parameters of the patients are provided in Table 1.

Table 1: Demographic characteristics

Total number	75
Male/Female	58/17
Median age (years)	65.6
Smokers	8
NSAID users	2
Alcohol abusers	7

The most common presenting complaint was the presence of abdominal pain or discomfort, present in all the study patients. Alarm symptoms were present in 32 study patients i.e. 42.6%. The presenting complaints of the study patients are provided in Table 2.

Table 2: Presenting complaints

Complaints	No. of patients
Abdominal pain/ discomfort	63
Heartburn	38
Recurrent vomiting	6
Belching	14
Bloating	35
Hiccough	4
Anorexia	20
Weight loss	17
Dysphagia	7
Early satiety	11

Endoscopic findings suggestive of significant disease were found in 60/75 patients i.e. 80%. (Table 3). Amongst these the most common endoscopic finding was that of gastro-esophageal malignancy in 21 patients (28%), followed by peptic ulcer disease in 17 patients (22.6%). Normal endoscopic study was found in 15 patients (20%).

Table 3: Endoscopic findings

Oesophagitis	10
Oesophageal Cancer	11
Gastric Ulcer	08
Antral erosions	14
Gastric Cancer	10
Duodenal Ulcer	07
Normal	15

Discussion

Dyspepsia is upper abdominal pain or discomfort that is episodic or persistent and often associated with belching, bloating, heartburn, nausea or vomiting.⁶

The reported prevalence of dyspepsia varies considerably; values of between 7% and 63% have been reported, with a mean of approximately 25%.⁸⁻⁹ There is a paucity of studies, on dyspepsia in the elderly, from the Indian subcontinent. In one study, it was reported that 66.1% of elderly individuals with dyspeptic symptoms have appreciable abnormalities on upper gastrointestinal endoscopy.¹⁰

The optimal management of dyspepsia remains a subject of considerable debate. The outstanding dilemma in the management is the choice between early endoscopy and empirical therapy.

In view of the increased incidence of gastric malignancies with advancing age, most physicians agree that referral for early upper endoscopy is always indicated in older patients.

The guidelines outlined in the Maastricht European Consensus Report recommend endoscopy for patients older than 45 years of age, whereas the American Digestive Health Foundation recommends endoscopy for dyspeptic patients older than 50 years.⁹

Following these guidelines may not be feasible in our context due to the cost involved and the lack of endoscopic facilities at the primary care level.

However, through our study, we were able to demonstrate that in elderly patients with new-onset dyspepsia endoscopic evaluation is necessary because it is commonly associated with a disease process and thus should be the initial approach in the management of these patients.

There is good evidence that symptoms cannot be reliably used to identify the cause of uninvestigated dyspepsia. Alarm symptoms are often used to identify patients who are at an increased risk of an underlying disease and who need early investigations. In our study, we found that alarm symptoms were present in 42.6% of the study patients. Of these a significant number of patients had an underlying disease on endoscopic evaluation.

Dyspepsia is commonly considered as a benign condition. Various studies have shown that in about

50 to 60 percent of patients, a specific etiology is not identified (i.e., "functional" or non-ulcer dyspepsia).^{9,11,12} Up to one quarter of patients with dyspepsia have symptoms caused by either a gastro duodenal ulcer or GERD.¹⁶ Gastric or esophageal cancers are serious causes but account for fewer than 2 percent of cases.^{9,13} Most of these studies have been carried out in younger individuals with dyspepsia and may not be applicable in the elderly.

There are reports that upper gastrointestinal endoscopy in elderly patients with dyspeptic symptoms gives a high diagnostic yield of 77% or more.^{15, 16}

Present study has also shown that 80% patients with new onset dyspepsia had a significant disease on endoscopic evaluation. The higher percentage of patients in the study with significant disease could be due to inclusion of patients with new-onset dyspepsia only.

In our study we have also found a high percentage of patients with gastro-esophageal malignancies. Further long-term studies are required to determine the prevalence of gastrointestinal malignancies in this part of the country to account for this high percentage.

Conclusion

Present study has demonstrated that new-onset dyspepsia in the elderly is associated with a significant underlying disease. Most of these patients had associated alarm symptoms. There was also a high percentage of patients with gastro-esophageal malignancies.

Thus, all patients of age 60 years and above, with new onset dyspepsia should undergo an endoscopic evaluation to rule out an underlying significant disease.

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