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Correlation of Upper GI Symptoms with Upper GI Endoscopy Findings

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Abstract

Background: Upper gastrointestinal (UGI) symptoms are common and may be associated with a wide range of benign and significant gastrointestinal disorders. UGI endoscopy provides direct visualization of the oesophagus, stomach and duodenum and helps establish the underlying diagnosis.

Aim: To evaluate the clinical presentation of patients with UGI symptoms and correlate their symptoms with UGI endoscopic findings.

Methods: This prospective analytical observational study was conducted at teritary care hospital of Gujarat. A total of 100 patients presenting with UGI symptoms and undergoing UGI endoscopy were included. Demographic characteristics, presenting symptoms, Helicobacter pylori status, endoscopic findings and ultrasonography findings were recorded and analyzed.

Results: The mean age of the study population was 41.8 years, with male predominance (66%). Epigastric pain was the most common symptom (85%), followed by nausea (55%). H. pylori positivity was observed in 34% of patients. Abnormal UGI endoscopic findings were detected in 78% of patients, while 22% had normal endoscopy. Antral gastritis was the most common abnormality (44% of abnormal endoscopies), followed by oesophageal varices (18%), hiatus hernia (10%) and carcinoma (9%). Dysphagia was present in all patients with carcinoma oesophagus and hiatus hernia.

Conclusion: UGI endoscopy demonstrated a high diagnostic yield in symptomatic patients. Epigastric pain was the predominant symptom, while dysphagia was strongly associated with significant oesophageal pathology. UGI endoscopy remains an important

diagnostic tool for evaluating patients with upper gastrointestinal symptoms.

Keywords: Upper Gastrointestinal Symptoms, Upper GI Endoscopy, Dyspepsia, Gastritis, Helicobacter Pylori, Oesophageal Varices.

Introduction

Upper gastrointestinal (UGI) disorders constitute an important cause of morbidity and are frequently encountered in clinical practice. Patients may present with a broad spectrum of symptoms ranging from relatively nonspecific complaints such as epigastric pain, nausea and dyspepsia to alarm symptoms including dysphagia, hematemesis, recurrent vomiting and weight loss. Because these symptoms may arise from a variety of structural and functional disorders, clinical assessment alone may not always establish the underlying diagnosis. Upper gastrointestinal endoscopy provides direct visualization of the oesophagus, stomach and duodenum and allows identification of mucosal, structural and vascular abnormalities, with the additional advantage of obtaining tissue for histopathological examination when required.

Dyspepsia is one of the most common upper gastrointestinal complaints and may be associated with gastritis, peptic ulcer disease, gastroesophageal reflux disease, hiatus hernia and other organic or functional conditions. Current clinical guidance emphasizes appropriate selection of patients for endoscopic evaluation, particularly when symptoms are persistent or associated with features suggestive of significant organic disease. Upper gastrointestinal endoscopy is particularly valuable in patients with symptoms such as dysphagia, gastrointestinal bleeding, weight loss and recurrent vomiting, as these may indicate important underlying pathology.[1,2]

Helicobacter pylori infection has an important relationship with upper gastrointestinal disease, particularly chronic gastritis and peptic ulcer disease. Its prevalence varies considerably between populations and geographical regions. Indian studies have demonstrated substantial H. pylori positivity among patients with dyspepsia, although the reported prevalence varies according to the population studied and the diagnostic method used.[3-5] Endoscopic biopsy can provide an opportunity not only to identify mucosal abnormalities but also to evaluate H. pylori infection and associated histopathological changes.

The relationship between presenting symptoms and actual endoscopic pathology is clinically important. Symptoms such as epigastric pain and nausea are common but may be associated with a wide range of endoscopic diagnoses. Conversely, symptoms such as dysphagia and hematemesis may be more suggestive of specific structural or bleeding lesions. Previous studies have demonstrated that dysphagia and upper gastrointestinal bleeding are associated with a higher likelihood of clinically relevant endoscopic disease.[2,6]

Oesophageal varices represent another important endoscopic finding, particularly in patients with underlying portal hypertension and chronic liver disease. Associated ultrasonographic abnormalities such as cirrhosis, ascites, splenomegaly and hepatomegaly may provide supportive evidence of underlying hepatobiliary disease. Thus, correlation of endoscopic findings with other available investigations can contribute to a more comprehensive understanding of the patient's clinical condition.

In the present study, 100 patients presenting with upper gastrointestinal symptoms and undergoing UGI endoscopy were evaluated. The study assessed the

demographic profile, presenting symptoms, H. pylori status, spectrum of UGI endoscopic abnormalities and ultrasonographic findings. The study also attempted to correlate major presenting symptoms with important endoscopic diagnoses, thereby evaluating the clinical relevance of symptom patterns in predicting underlying UGI pathology. The primary outcome was the spectrum of endoscopic diagnoses identified among patients presenting with UGI symptoms.

Materials and Methods

Study Design and Study Setting

The present study was designed as a prospective analytical observational study conducted at teritary care hospital of Gujarat. The study included patients presenting to the hospital with symptoms suggestive of upper gastrointestinal (UGI) disease who underwent upper gastrointestinal endoscopy as part of their clinical evaluation.

The study was undertaken to evaluate the clinical presentation and endoscopic findings among patients presenting with upper gastrointestinal symptoms and to assess the spectrum of diagnoses identified on upper gastrointestinal endoscopy.

Study Population

The study population comprised patients presenting to teritary care Hospital with one or more upper gastrointestinal symptoms and who subsequently underwent UGI endoscopy during the study period.

Sample Size

A total of 100 patients fulfilling the predefined eligibility criteria were included in the study. The sample size was determined using a descriptive sampling approach.

Inclusion Criteria

Patients were included in the study if they fulfilled the following criteria:

1. Patients presenting to teritary care Hospital with upper gastrointestinal symptoms.
2. Patients who underwent upper gastrointestinal endoscopy during the study period.
3. Patients willing to participate in the study and provide informed consent.

Exclusion Criteria

The following patients were excluded from the study:

1. Patients who were unwilling to participate in the study.
2. Patients with an immunocompromised status or significant comorbid conditions such as cardiac disease, respiratory disease, or organ failure.
3. Patients with a history of corrosive poisoning.
4. Patients presenting with massive upper gastrointestinal bleeding.

Patients presenting with upper gastrointestinal symptoms were initially evaluated by detailed clinical history and physical examination. Relevant demographic details, presenting complaints, past medical history, clinical findings, laboratory investigations, radiological investigations, and endoscopic findings were recorded using a structured case proforma.

The common presenting complaints recorded in the study included epigastric pain, nausea, dyspepsia, vomiting, dysphagia, odynophagia, hematemesis, anorexia, and loss of weight. Relevant past history, including hypertension, diabetes mellitus, thyroid disease, tuberculosis, previous major surgery, previous hospital admission, and history of blood transfusion, was also documented.

All patients underwent UGI endoscopy according to clinical indication and institutional protocol. Endoscopic findings were recorded and the final diagnosis was established based primarily on the UGI endoscopic

findings. Where clinically indicated, tissue samples were obtained for histopathological examination.

Clinical Examination

A detailed general and systemic examination was performed for each patient. Vital parameters, including blood pressure, pulse rate, temperature, and respiratory rate, were recorded. General physical examination included assessment for pallor, icterus, cyanosis, clubbing, oedema, and lymphadenopathy.

Per-abdominal examination was performed to assess for relevant abdominal findings. The clinical diagnosis made after initial evaluation was recorded in the case proforma.

Investigations

The following investigations were recorded wherever performed as part of routine clinical evaluation:

- Complete blood count (CBC)
- Renal function tests (RFT)
- Hepatitis B surface antigen (HBsAg)
- Human immunodeficiency virus (HIV) testing
- Hepatitis C virus (HCV) testing
- Ultrasonography (USG) of abdomen/pelvis
- Computed tomography (CT) scan of abdomen and pelvis, where indicated

Histopathological examination was performed when a biopsy was obtained during UGI endoscopy. The histopathology report was recorded in the study proforma.

Upper Gastrointestinal Endoscopy

Upper gastrointestinal endoscopy was performed in patients fulfilling the clinical indications and eligibility criteria. The oesophagus, stomach, and duodenum were systematically evaluated for mucosal and structural abnormalities. Endoscopic findings were documented, and the final endoscopic diagnosis was recorded for each patient.

Where an abnormal lesion requiring tissue diagnosis was identified, an endoscopic biopsy was obtained and submitted for histopathological examination according to standard institutional practice.

Data Collection

A structured case proforma was prepared for systematic collection of patient-related information. The proforma included demographic details, registration number, ward, address, dates of admission, UGI endoscopy and discharge, clinical history, presenting complaints, past medical history, examination findings, investigations, radiological findings, histopathology findings where available, final endoscopic diagnosis, and outcome.

The collected information was subsequently entered into a computerized Microsoft Excel database for organization and analysis. Patient identifiers and clinical information were maintained confidentially throughout the study.

Ethical Considerations

Patients fulfilling the inclusion criteria were informed about the purpose, objectives, procedures, and relevance of the study in a language understood by them. A Participant Information Sheet was provided, and patients were given adequate opportunity to clarify any doubts regarding participation.

Written informed consent was obtained before inclusion in the study. Participation was voluntary, and patients were assured that refusal to participate would not affect their medical care. The investigations included in the study were those performed as part of routine clinical evaluation and were not undertaken solely for research purposes. Patient confidentiality was maintained throughout data collection, analysis, and reporting.

Outcome Assessment

The primary outcome was the spectrum of endoscopic diagnoses among patients presenting with upper gastrointestinal symptoms.

The clinical and endoscopic findings were correlated to characterise the underlying gastrointestinal conditions identified in the study population. The final diagnosis was based on UGI endoscopic findings, supplemented by histopathological findings where biopsy was performed.

Patient outcomes were recorded as:

- Discharged
- Mortality

Statistical Analysis

The collected data were entered into Microsoft Excel and systematically tabulated. Descriptive statistical methods were used to summarize the study variables. Categorical variables were expressed as frequencies and percentages, while continuous variables were summarized using appropriate measures of central tendency and dispersion.

The data were presented in the form of tables and charts wherever appropriate. Analytical statistical methods were applied to assess relevant associations between clinical characteristics and endoscopic findings. The level of statistical significance was considered at $p < 0.05$. The statistical analysis was performed using an appropriate statistical software package.

Results and Observations

The present prospective analytical study was conducted at teritary care Hospital of Gujarat. A total of 100 patients presenting with upper gastrointestinal (UGI) symptoms and undergoing UGI endoscopy were included in the study. The demographic profile, presenting symptoms, Helicobacter pylori status, endoscopic findings, and ultrasonography findings were evaluated.

Table 1: Age and Sex Distribution of the Study Population (N=100)

Age group (years)	Male, n (%)	Female, n (%)	Total, n (%)
<20	2 (3%)	7 (21%)	9 (9%)
21–30	10 (15%)	4 (12%)	14 (14%)
31–40	15 (23%)	7 (21%)	22 (22%)
41–50	25 (38%)	6 (18%)	31 (31%)
51–60	6 (9%)	6 (18%)	12 (12%)
>60	8 (12%)	4 (12%)	12 (12%)
Total	66 (100%)	34 (100%)	100 (100%)

The overall mean age of the study population was 41.8 years. The mean age among males was 43.3 years, while that among females was 38.7 years. The largest proportion of patients belonged to the 31–50-year age group, comprising 53% of the study population. Patients aged below 30 years constituted 23%, whereas 24% were above 50 years.

Table 2: Overall Sex Distribution of the Study Population (N=100)

Sex	Number	Percentage
Male	66	66%
Female	34	34%
Total	100	100%

There was a male predominance in the study population, with 66 (66%) males and 34 (34%) females, giving a male-to-female ratio of approximately 1.94:1.

Table 3: Distribution of Presenting Upper Gastrointestinal Symptoms (N=100)

Presenting symptom	Number	Percentage
Epigastric pain	85	85%
Nausea	55	55%
Dysphagia	23	23%
Vomiting	18	18%

Hematemesis	18	18%
Dyspepsia	11	11%
Odynophagia	4	4%

Observation: Epigastric pain was the most frequent presenting symptom, reported in 85% of patients, followed by nausea in 55%. Dysphagia was reported in 23%, while vomiting and hematemesis were each reported in 18%. Dyspepsia and odynophagia were reported in 11% and 4% of patients, respectively.

Table 4: Helicobacter pylori Test Status among Study Participants (N=100)

H. pylori status	Number	Percentage
Positive	34	34%
Negative	66	66%
Total	100	100%

The H. pylori test was positive in 34 (34%) patients, whereas 66 (66%) patients were negative. Thus, the overall prevalence of H. pylori positivity in the study population was 34%.

Table 5: Overall UGI Endoscopic Findings (N=100)

UGI endoscopic finding	Number	Percentage
Normal endoscopy	22	22%
Abnormal endoscopy	78	78%
Total	100	100%

UGI endoscopy was performed in all 100 patients. Abnormal endoscopic findings were observed in 78 (78%) patients, while 22 (22%) had no significant abnormality on endoscopy.

Table 6. Spectrum of Abnormal UGI Endoscopic Findings (N=78)

Endoscopic finding	Number	Percentage*
Antral gastritis	34	44%
Oesophageal varices	14	18%
Hiatus hernia	8	10%
Carcinoma oesophagus	7	9%
Foreign body	4	5%
Achalasia cardia	3	4%
Mallory–Weiss tear	3	4%
Fundal gastritis	2	3%
Gastric ulcer	1	1%
Mild distal erosive oesophagitis	1	1%
Portal hypertensive gastropathy	1	1%

*Percentages are based on the 78 patients with abnormal endoscopic findings.

Among patients with abnormal endoscopy, antral gastritis was the most common finding, observed in 34 (44%) patients, followed by oesophageal varices in 14 (18%), hiatus hernia in 8 (10%), and carcinoma oesophagus in 7 (9%). Less frequent findings included foreign body, achalasia cardia, Mallory–Weiss tear, fundal gastritis, gastric ulcer, mild distal erosive oesophagitis, and portal hypertensive gastropathy.

Table 7: Presenting Symptoms among Patients with Major Endoscopic Diagnoses

Symptom	Antral gastritis (N=34)	Oesophageal varices (N=14)	Carcinoma oesophagus (N=7)	Hiatus hernia (N=8)
Epigastric Pain	31 (91%)	13 (93%)	6 (86%)	6 (75%)
Nausea	27 (79%)	7 (50%)	4 (57%)	4 (50%)
Dysphagia	—	—	7 (100%)	8 (100%)
Vomiting	6 (18%)	—	2 (29%)	—
Hematemesis	—	8 (57%)	—	1 (13%)
Dyspepsia	6 (18%)	—	—	—
Odynophagia	—	—	1 (14%)	—

Observation: Among patients with antral gastritis, epigastric pain was the predominant symptom (91%), followed by nausea (79%). In patients with oesophageal

varices, epigastric pain was present in 93%, followed by hematemesis (57%) and nausea (50%). All patients with carcinoma and hiatus hernia had dysphagia. Epigastric pain was present in 86% of carcinoma oesophagus patients and 75% of patients with hiatus hernia.

Table 8: Ultrasonography Status among the Study Population (N=100)

USG status	Number	Percentage
USG performed	80	80%
└ Normal findings	50	63%*
└ Abnormal findings	30	38%*
USG not performed	20	20%
Total	100	100%

*Percentage among patients who underwent USG.

USG abdomen/pelvis was performed in 80 (80%) patients. Among these, 50 (63%) had normal findings and 30 (38%) had abnormal findings.

Table 9: Spectrum of Abnormal USG Findings (N=30)

Abnormal USG finding	Number	Percentage
Cholelithiasis	9	30%
Hepatomegaly	9	30%
Ascites	9	30%
Fatty liver	6	20%
Splenomegaly	5	17%
Cirrhosis of liver	4	13%
Hepatosplenomegaly	1	3%

Among patients with abnormal USG findings, cholelithiasis, hepatomegaly, and ascites were the most frequently observed findings, each occurring in 9 patients (30%). Fatty liver was observed in 6 (20%), splenomegaly in 5 (17%), cirrhosis of liver in 4 (13%), and hepatosplenomegaly in 1 (3%) patient.

Table 10: UGI Endoscopic Findings among Patients with Cholelithiasis on USG

USG finding	Normal UGI endoscopy, n (%)	Abnormal UGI endoscopy, n (%)	Total
Cholelithiasis	9 (100%)	0 (0%)	9
No cholelithiasis	1 (5%)	20 (95%)	21
Total	10 (33%)	20 (67%)	30

All 9 patients with cholelithiasis on USG had normal UGI endoscopy. Among patients without cholelithiasis, 20 had abnormal UGI endoscopic findings.

Table 11: Ultrasonographic Findings among Patients with and without Oesophageal Varices

USG finding	Oesophageal varices present, n (%)	Oesophageal varices absent, n (%)
Cholelithiasis	0 (0%)	9 (52.9%)
Cirrhosis	5 (18.5%)	0 (0%)
Splenomegaly	5 (18.5%)	0 (0%)
Fatty liver	0 (0%)	6 (35.3%)
Ascites	9 (33.3%)	0 (0%)
Hepatomegaly	7 (25.9%)	2 (11.8%)
Hepatosplenomegaly	1 (3.7%)	0 (0%)
Total	27	17

Among patients with oesophageal varices, associated USG abnormalities included ascites (33.3%), hepatomegaly (25.9%), cirrhosis (18.5%), splenomegaly (18.5%), and hepatosplenomegaly (3.7%). These findings demonstrated the presence of hepatobiliary abnormalities in patients with oesophageal varices.

Discussion

The present prospective analytical observational study evaluated 100 patients presenting with upper gastrointestinal symptoms who underwent UGI endoscopy at teritary care Hospital. The study focused on the relationship between clinical presentation and

endoscopic findings and additionally evaluated H. pylori status and ultrasonographic abnormalities.

Demographic profile

In the present study, the mean age of the participants was 41.8 years, with the largest proportion belonging to the 31–50-year age group. Males constituted 66% of the study population, while females constituted 34%, resulting in a male-to-female ratio of approximately 1.94:1. This male predominance is comparable with findings from other Indian studies of dyspeptic patients. Dutta et al., in a prospective study of 1000 patients with dyspepsia, reported a mean age of approximately 40 years and a male predominance, with males constituting 69.3% of the study population.[7] The similarity in demographic distribution suggests that symptomatic patients undergoing endoscopic evaluation in tertiary-care settings frequently comprise predominantly middle-aged men.

The concentration of patients in the 31–50-year age group is clinically relevant because this period represents an age at which both benign upper gastrointestinal disorders and clinically important structural lesions may be encountered. In an Indian endoscopy study, malignancy was identified even among relatively younger patients, supporting the importance of considering local disease patterns while deciding on endoscopic evaluation.[8]

Presenting symptoms

Epigastric pain was the predominant symptom in the present study, occurring in 85% of patients, followed by nausea in 55%. Dysphagia was present in 23%, while vomiting and hematemesis were each reported in 18%. Dyspepsia and odynophagia were reported in 11% and 4%, respectively.

The predominance of epigastric pain is consistent with the clinical presentation of many patients undergoing evaluation for upper gastrointestinal disease. In a recent Indian study of dyspeptic patients, epigastric pain was also the most frequent symptom, reported in 76.1% of participants.[9] These findings demonstrate that although epigastric pain is highly prevalent, it remains a nonspecific symptom and cannot by itself reliably distinguish among the various organic abnormalities detected on endoscopy.

The presence of dysphagia and hematemesis in a substantial proportion of patients is particularly important. Dysphagia is considered an alarm symptom because it may be associated with structural oesophageal disease, while hematemesis suggests upper gastrointestinal bleeding. Previous evidence has demonstrated a higher yield of relevant endoscopic disease among patients presenting with dysphagia or upper gastrointestinal bleeding.[2,6]

Helicobacter pylori status

In the present study, H. pylori positivity was documented in 34% of patients, whereas 66% were negative.

The prevalence observed in the present study is lower than that reported in several Indian studies. Satpathi et al. reported H. pylori infection in 58.8% of dyspeptic patients in an industrial belt of India, while Dutta et al. reported positivity in 41.9% of 1000 dyspeptic patients.[4,7] A study from Kashmir reported an even higher positivity rate of approximately 58% among patients with functional dyspepsia.[5] Differences between studies may be related to geographical variation, patient selection, age distribution, diagnostic methodology, previous antimicrobial or acid-suppressive treatment and the proportion of patients with specific endoscopic lesions.

The relatively lower positivity rate in the present study should therefore not be interpreted as evidence of a weak association between H. pylori and upper gastrointestinal disease. Rather, it emphasizes the considerable regional

and population-level variability in infection rates. Earlier North Indian research has also demonstrated a substantial prevalence of H. pylori among patients with non-ulcer dyspepsia and a relationship between bacterial density and severity of antral gastritis.[3]

UGI endoscopic findings

Abnormal UGI endoscopic findings were identified in 78% of the study population, while 22% had no significant endoscopic abnormality.

This high proportion of abnormal endoscopic examinations demonstrates the diagnostic value of endoscopy in appropriately selected symptomatic patients. Endoscopy provides direct visualization of the mucosa and allows detection of lesions that may not be identifiable from symptoms alone. Previous studies assessing the appropriateness of diagnostic endoscopy have similarly shown that relevant endoscopic disease is found in a meaningful proportion of patients presenting with dyspeptic symptoms and alarm features.[6,10]

Antral gastritis was the most common abnormality in the present study, accounting for 34 of the 78 patients with abnormal endoscopy (44%). This finding is consistent with the recognized importance of gastritis among patients presenting with upper gastrointestinal symptoms. Indian studies have also reported gastritis as one of the most frequent endoscopic abnormalities among dyspeptic patients.[4,9]

Oesophageal varices were the second most common abnormal finding, occurring in 14 patients (18%), followed by hiatus hernia in 8 (10%) and carcinoma oesophagus in 7 (9%). Other abnormalities included foreign body, achalasia cardia, Mallory–Weiss tear, fundal gastritis, gastric ulcer, mild distal erosive oesophagitis and portal hypertensive gastropathy.

The detection of oesophageal carcinoma in 7% of the study population is clinically significant. This finding reinforces the importance of endoscopic assessment in patients with alarm symptoms, particularly dysphagia and weight loss. In the present study, all patients with carcinoma oesophagus had dysphagia, and 86% also had epigastric pain.

Correlation of symptoms with major endoscopic diagnoses

The symptom–endoscopy relationship provided important observations. Among patients with antral gastritis, epigastric pain was present in 91% and nausea in 79%. Among patients with oesophageal varices, epigastric pain was present in 93%, hematemesis in 57% and nausea in 50%. Importantly, all patients with carcinoma oesophagus and hiatus hernia had dysphagia.

These findings illustrate both the usefulness and limitations of symptom-based diagnosis. Epigastric pain occurred across several different endoscopic diagnoses, indicating that it is a sensitive but nonspecific symptom. In contrast, dysphagia showed a stronger clinical relationship with oesophageal structural abnormalities in the present dataset. This supports the established role of dysphagia as an alarm symptom warranting careful evaluation.[1,2]

The finding that all patients with carcinoma oesophagus presented with dysphagia is particularly noteworthy, although the small number of carcinoma cases limits the ability to generalize this observation. Similarly, the association of hematemesis with oesophageal varices is clinically plausible and consistent with the role of varices as an important source of upper gastrointestinal bleeding in patients with portal hypertension.

Ultrasonography findings and oesophageal varices

Ultrasonography was performed in 80% of patients. Among those examined, 63% had normal findings and 38% had abnormal findings. Cholelithiasis, hepatomegaly and ascites were the most frequent abnormalities, each occurring in 30% of patients with abnormal ultrasonography. Fatty liver was found in 20%, splenomegaly in 17%, cirrhosis in 13% and hepatosplenomegaly in 3%.

A notable observation was the relationship between ultrasonographic abnormalities and oesophageal varices. Among patients with oesophageal varices, ascites was present in 33.3%, hepatomegaly in 25.9%, cirrhosis in 18.5%, splenomegaly in 18.5% and hepatosplenomegaly in 3.7%.

These findings support the clinical relevance of evaluating the hepatobiliary system in patients with oesophageal varices. Although the present study was observational and cannot establish causality, the coexistence of cirrhosis, splenomegaly and ascites with varices is compatible with the underlying portal hypertensive state commonly associated with chronic liver disease.

Interestingly, all nine patients with cholelithiasis identified on ultrasonography had normal UGI endoscopy. This finding suggests that an ultrasonographic abnormality does not necessarily imply an abnormal upper gastrointestinal mucosal or structural finding. Rather, different diagnostic modalities identify different anatomical and pathological processes and should therefore be interpreted in the context of the presenting symptoms and clinical examination.

Overall, the findings of the present study demonstrate that upper gastrointestinal symptoms have a variable relationship with underlying endoscopic pathology. Epigastric pain and nausea were common but nonspecific, whereas dysphagia and hematemesis were more closely associated with clinically important oesophageal abnormalities. Endoscopy identified abnormal findings in the majority of symptomatic patients, with antral gastritis being the most common lesion.

The findings also emphasize the importance of integrating clinical assessment with endoscopy and, when indicated, ultrasonography and histopathological examination. Current dyspepsia guidelines recommend a structured approach to investigation and emphasize appropriate endoscopic evaluation according to age, risk profile and clinical presentation.[1] In the Indian setting, where significant upper gastrointestinal pathology may occur at relatively younger ages, local epidemiological patterns should also be considered when deciding on investigation.[8,11]

The present study therefore supports the continued role of UGI endoscopy as an important diagnostic investigation in patients with persistent or clinically significant upper gastrointestinal symptoms, particularly when alarm features are present. At the same time, the presence of normal endoscopy in 22% of participants indicates that symptoms alone do not necessarily imply structural disease and that functional or non-endoscopic causes may account for symptoms in a subset of patients.

Conclusion

UGI endoscopy identified abnormal findings in the majority (78%) of symptomatic patients, with antral gastritis being the most common lesion. Epigastric pain was the predominant symptom, while dysphagia showed a strong association with significant oesophageal pathology. UGI endoscopy therefore remains an important diagnostic tool for evaluating patients with upper gastrointestinal symptoms.

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