

# Correlation between clinical presentation and endoscopic findings in gastroesophageal reflux disease

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## Abstract

**Background:** Gastroesophageal acid reflux causes a variety of clinical symptoms. Endoscopic evaluation is a reliable tool for evaluation of esophagitis and the Los Angeles Classification is one of the most accepted grading systems of esophageal mucosal break. **Aim:** To correlate between clinical presentation and endoscopic findings in gastroesophageal reflux disease. **Material and Methods:** A total of 75 patients coming to medicine OPD with complains of upper abdominal pain were selected as symptomatically diagnosed cases of GERD if they had 2 or more of the above symptoms for more than one month. Endoscopy was done in all cases with flexible Fujinon fiberoptic endoscope. Endoscopic findings were graded as according to severity and the grade of esophagitis was decided as per Los Angeles classification. **Results:** Heartburn was the most common symptom found in 34 patients of erosive esophagitis (94.4%) followed by regurgitation in 29 patients (80.6%). Los Angeles grade A esophagitis was the most common finding found in 15 cases (41.7%) followed by grade B in 14 cases (38.9%). **Conclusion:** Incidence of erosive esophagitis in patients with gastroesophageal reflux disease (GERD) is increasing in Indian population. Awareness regarding symptoms as well a use of upper gastrointestinal endoscopy in suspected cases is needed so as to detect esophagitis at an earlier stage and also prevent long term complication of GERD.

**Key Words:** gastroesophageal reflux disease, erosive esophagitis, endoscopy, Los Angeles classification

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## INTRODUCTION

Gastroesophageal acid reflux causes a variety of clinical symptoms, such as heartburn, regurgitation, dysphagia, epigastric pain, nausea, bloating sensation etc. These are typical symptoms of Gastroesophageal reflux disease (GERD).<sup>1</sup>

There are also symptoms which are not directly related to the gastrointestinal system but are caused as effect of the reflux material. These 'atypical symptoms' are predominantly respiratory and include sore throat, hoarseness of voice, persistent cough and deteriorating respiratory efficiency. Endoscopic evaluation is a reliable tool for evaluation of esophagitis and the Los Angeles Classification is one of the most accepted grading systems of esophageal mucosal break.<sup>2,3</sup> There is a wide disparity in clinical practice where at one side there is overuse of endoscopy as a diagnostic tool causing discomfort as well as expense to the patient and burden on the health service, while at other end underutilization of endoscopy led to diagnosis of esophagitis at an advanced and often complicated stage. The present study was carried out to correlate between clinical presentation and endoscopic findings in gastroesophageal reflux disease.

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## MATERIAL AND METHODS

This cross-sectional study was conducted over a period of two years after obtaining the ethical approval from Institutional Ethics committee. A total of 75 patients coming to medicine OPD with complains of upper abdominal pain were selected as symptomatically diagnosed cases of GERD if they had 2 or more of the above symptoms for more than one month. Symptoms such as heartburn, regurgitation, dysphagia, epigastric pain, watery brash, nausea, bloating sensation, sore throat, hoarseness of voice and persistent cough were considered as of Gastroesophageal reflux disease (GERD). Detailed history of the patient was taken with regards to the symptoms and precipitating factors. Thorough clinical examination of the patients was done. Routine hematological examination of the patient was done. ECG and USG abdomen was done to rule out cardiac and abdominal pathologies respectively.

### Inclusion criteria

- Patients who had symptoms consistent with symptoms of gastroesophageal reflux disease (GERD).
- At least 2 symptoms were occurring for more than one month.

### Exclusion criteria

- Patients with history of intake of drugs known to cause esophageal motility disorders.
- Patients with age less than 14 yrs.
- Patients with co-morbid diseases like severe IHD, cervical spondylosis, trismus etc.
- Patients with haematemesis.

### Endoscopy procedure

Patients were asked not to take any food or drink from night prior to endoscopy. On the day of endoscopy, a written informed consent was taken. Patients were asked to swallow viscous xylocaine solution (a surface/ topical anaesthetic agent 5min prior to endoscopy. Endoscopy was done in all cases with flexible Fujinon fibreoptic endoscope. Endoscopic findings were graded as according to severity and the grade of esophagitis was decided as per Los Angeles classification.<sup>4</sup> Presence of incompetent LES or hiatus hernia were also looked for. Stomach and duodenum were also visualized to find out, any other local pathology which gave symptoms similar to GERD.

## RESULTS

Out of the 75 patients, the most common age group was 31-40 years 18 (24%) followed by 21-30 years 16 (22%) and 41-50 years 16 (22%). 11 (14.7%) patients were between 51-60 years of age group whereas, 9 (12%) were between 14-20 years and 5 (6.7%) were more than 60 years of age. There were 39 (52%) males and 36 (48%) females with male to female ratio of 1.08:1.

**Table 1: Symptoms strongly correlating with esophagitis**

Symptoms	No. of patients	Percentage
Heartburn	34	94.4%
Regurgitation	29	80.6%
Dysphagia	19	52.8%
Watery Brash	17	47.2%
Epigastric pain	08	22.2%
Vomiting	05	13.8%
Odynophagia	01	2.8%

Heartburn was the most common symptom found in 34 patients of erosive esophagitis (94.4%) followed by regurgitation in 29 patients (80.6%). Thus, the commonest symptoms that were present in patients with esophagitis were heartburn, regurgitation, dysphagia and watery brash. Presence of above symptoms warrants an upper gastrointestinal endoscopic study of the patient even if symptomatic relief be achieved by medication.

**Table 2: Endoscopic findings in patients with GERD**

Endoscopic Findings	No. of cases	Percentage
Erosive Esophagitis (grade 1-4)	32	42.7%
Barrett's esophagus	01	1.3%
Gastric ulcer & antral gastritis	04	5.3%
Growth	03	4%
Hiatus hernia & erosive esophagitis	03	4%
Growth & erosive esophagitis	01	1.3%
Within normal limits	31	41.3%

Erosive esophagitis was found in 36 total patients (48%) and non-erosive esophagitis was found in 31 patients (41.3%). The hiatus hernia with esophagitis was found in 3 patients (4%). Growth was found in 4 patients total (5.3%). Biopsy was taken and samples were sent for histopathological analysis. Los Angeles grade A esophagitis was the most common finding found in 15 cases (41.7%) followed by grade B in 14 cases (38.9%), grade C in 6 (16.7%) and grade D in 1 (2.8%). In our study, we found that heartburn was the most common symptom associated with all grades of esophagitis and most common with grade A (38.9%) followed by regurgitation (36.1%).

**Table 3:** Correlation endoscopic finding with clinical presentation

LA grading	Heartburn	Regurgitation	Dyspepsia	Watery brash	Epigastric pain	Vomiting	Odynophagia
A	14 (38.9%)	13 (36.1%)	06 (16.7%)	09 (25%)	02 (5.6%)	01 (2.8%)	00 (0%)
B	13 (36.1%)	09 (25%)	08 (22.2%)	05 (13.9%)	01 (2.8%)	03 (8.3%)	00 (0%)
C	06 (16.7%)	06 (16.7%)	05 (13.9%)	03 (8.3%)	04 (11.1%)	01 (2.8%)	01 (2.8%)
D	01 (2.8%)	01 (2.8%)	00 (0%)	00 (0%)	01 (2.8%)	00 (0%)	00 (0%)

## DISCUSSION

Gastroesophageal reflux disease (GERD) is a common cause of upper abdominal discomfort and is one of the commonest pathology affecting the esophagus. Due to varied diagnostic criteria and unavailability of modes of objective diagnosis (pH monitoring and impedance manometry) there are no clear-cut diagnostic criteria which are available and accessible to the treating physician. Gastroesophageal reflux disease (GERD) thus remains under-diagnosed and is treated many a times when complications have arisen. The present study was conducted to have a overview of this disease with special emphasis on endoscopic evaluation and detection of erosive esophagitis. In our study we found heartburn, regurgitation, dysphagia and watery brash as the most common symptoms associated with erosive esophagitis as detected on endoscopy. If such symptoms were seen in a patient, then should be subjected to upper gastrointestinal endoscopy. A survey conducted by the University of Washington showed a slight different frequency of the above symptoms. In our study, we found that heartburn was the most common symptom associated with all grades of esophagitis and most common with grade A (38.9%) followed by regurgitation (36.1%). Zuberi *et al* found most common symptoms were epigastric pain and heartburn with all grade of esophagitis. Reflux symptoms are common in the adult population: up to 15-20% of Western populations experience heart- burn and/or acid regurgitation weekly.<sup>6,7</sup>

## CONCLUSION

Incidence of erosive esophagitis in patients with gastroesophageal reflux disease (GERD) is increasing in

Indian population. Awareness regarding symptoms as well a use of upper gastrointestinal endoscopy in suspected cases is needed so as to detect esophagitis at an earlier stage and also prevent long term complication of GERD.

## REFERENCES

1. DeVault KR, Castell DO. The practice parameters committee of the American college of gastroenterology. Updated guidelines for the diagnosis and treatment of gastroesophageal reflux disease. *Am J Gastroenterol* 1994;14:34-42.
2. Armstrong D, Bennett JR, Blum AL, Dent J, DeDombal FT, Galmiche JP, *et al*. The endoscopic assessment of esophagitis: a progress report on observer agreement. *Gastroenterology* 1996;111:85-92.
3. Lundell LR, Dent J, Bennett JR, Blum AL, Armstrong D, Galmiche JP, *et al*. Endoscopic assessment of esophagitis: clinical and functional correlates and further validation of the Los Angeles classification. *Gut* 1999;45:172-80.
4. Sami SS, Raganath K. The Los Angeles Classification of Gastroesophageal Reflux Disease. *Video Journal and Encyclopedia of GI Endoscopy* 2013;1(1):103-104.
5. Zuberi BF, Faisal N, Quraishy MS, Afsar S, Kazi LA, Kazim E. Correlation between clinical, endoscopic and histological findings at esophago-gastric junction in patients of gastroesophageal reflux disease. *Journal-College Of Physicians And Surgeons of Pakistan*. 2005;15:774.
6. Locke GR III, Talley NJ, Fett SL, Zinsmeister AR, Melton LJ III. Prevalence and clinical spectrum of gastroesophageal reflux: A population-based study in Olmsted County, Minnesota. *Gastroenterology* 1997;112:1448-1456.
7. Isolauri J, Laippala P. Prevalence of symptoms suggestive of gastroesophageal reflux disease in an adult population. *Ann Intern Med* 1995;27: 67-70.

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