

ORIGINAL ARTICLE

ENDOSCOPY IN TIME CAN BE A LIFE SAVER: OUR UPPER ENDOSCOPY RESULTS

Mustafa Sit¹, Gulali Aktas², Edip E Yılmaz¹**Authors' Affiliation:** ¹Abant İzzet Baysal University Hospital, Department of General Surgery; ²Abant İzzet Baysal University Hospital, Department of Internal Medicine, Bolu, Turkey**Correspondence:** Mustafa SIT, E-mail: drmustafasit@yahoo.com.tr

ABSTRACT

Objectives: Endoscopy is the best diagnostic test for the diseases in upper digestive system. In addition to diagnosis, endoscopy is also useful in treatment of specific conditions.**Methods:** The patients admitted to Doğubayazıt state hospital's endoscopy unit between 2008 January and 2011 July enrolled to the study. Endoscopy was performed with a GIF- XQ30 Olympus device. We assessed endoscopic findings of 3158 patients retrospectively.**Results:** A total of 3158 patients (1434 male and 1724 female) enrolled to the study. Gastritis was the most common diagnosis in our series. Patients with duodenal ulcer (mean age: 38,3+/-14,3 years) were younger than those with gastric ulcer (mean age: 48,4+/-15,8 years).**Conclusions:** Although gastritis, esophagitis and bile reflux, which are benign conditions, were common diagnosis in our series, endoscopy should not be delayed in symptomatic patients because, according to our findings, 2 or 3 of every 100 patients undergone endoscopic examination may have malign tumors in upper gastrointestinal system.**Keywords:** endoscopy, gastritis, malign tumors

INTRODUCTION

Epigastric pain, regurgitation, pyrosis, dysphagia, nausea and vomiting are symptoms of patients with upper gastrointestinal diseases. Beside these symptoms are due to several upper gastrointestinal diseases, they also may indicate functional diseases of upper digestive system. Barium enhanced X ray imaging techniques are being used for motility disorders, pyloric obstructions and before serious operations of upper gastrointestinal tract. Endoscopy is the best diagnostic test for the diseases in upper digestive system. In addition to diagnosis, endoscopy is also useful in treatment of specific conditions. We aim to observe the endoscopic diagnosis of our 3 years experience.

MATERIALS AND METHODS

The patients admitted to Doğubayazıt state hospital's endoscopy unit between 2008 January and 2011 July enrolled to the study. Indications for endoscopy were as follows: unexplained upper gastrointestinal symptoms such as dysphagia, retrosternal burning, epigastric pain, pyrosis, nausea, vomiting, iron deficiency anemia, gastric carcinoma history in first degree relatives, hematemesis, melaena or occult blood in stool. Patients are advised not to ingest food before 6-8 hours of the endoscopic procedure. Sedative agents or antispasmodics administered if necessary during endoscopy. Midazolam 1-5 mg intravenously used as

sedative and flumazenil was ready to use if necessary. Xylocain 10% was used for oropharyngeal anesthesia. Endoscopy was performed with a GIF- XQ30 Olympus device. We assessed endoscopic findings of 3158 patients retrospectively.

RESULTS

A total of 3158 patients (1434 male and 1724 female) enrolled to the study. Mean age of the male and female patients were 44 +/- 15.7 years and 42.7 +/- 16.3 years respectively. Gastritis was the most common diagnosis in our series. 1396 patients (44.2%) diagnosed with gastritis in upper endoscopy. 526 patients (16.6%) had hiatal hernia. Esophagitis accompanied in 92 of the 526 patients with hiatal hernia. Table 1 shows the endoscopic diagnosis of the patients. We established bile reflux into the stomach in 229 (7.3%) patients. Frequency of duodenal and gastric ulcer in our series was 6.8% (216 patients) and 5.7% (180 patients), respectively. Mean age of the patients diagnosed gastric carcinoma was 60.9 +/-14 years. Patients diagnosed with esophageal carcinoma (mean age 56.2+/-15.4 years) were younger than those diagnosed with gastric carcinoma. Patients with duodenal ulcer (mean age: 38.3+/-14.3 years) were younger than those with gastric ulcer (mean age: 48.4+/-15.8 years).

Table 1. Endoscopic diagnosis of the patients

Endoscopic diagnosis	Male (%)	Female (%)	Total (%)
Gastritis	622 (43.4)	774 (44.9)	1396 (44.2)
Hiatal hernia	232 (16.2)	202 (11.7)	434 (13.7)
Hiatal hernia with esophagitis	26 (1.8)	66 (3.8)	92 (2.9)
Esophagitis	62 (4.3)	23 (1.3)	85 (2.7)
Esophagitis+ duodenitis	48 (3.3)	68 (3.9)	116 (3.7)
Duodenitis	44 (3.1)	70 (4.1)	114 (3.6)
Duodenal ulcer	116 (8.1)	100 (5.8)	216 (6.8)
Gastric ulcer	79 (5.5)	101 (5.9)	180 (5.7)
Gastric carcinoma	31 (2.2)	24 (1.4)	55 (1.7)
Gastric polyp	11 (0.8)	20 (1.2)	31 (1.0)
Bile reflux into stomach	89 (6.2)	140 (8.1)	229 (7.3)
Esophageal carcinoma	10 (0.7)	21 (1.2)	31 (1.0)
Barret esophagus	6 (0.4)	1 (0.1)	7 (0.2)
Esophageal diverticulosis	0 (0)	5 (0.3)	5 (0.2)
Esophageal foreign body	1 (0.1)	2 (0.1)	3 (0.1)
Normal	13 (0.9)	100 (5.8)	144 (4.6)
Other diagnosis	13 (0.9)	7 (0.4)	20 (0.6)

DISCUSSION

Endoscopy is the gold standard in examination of upper gastrointestinal symptoms. Beside diagnosis, endoscopy is also useful in treatment of different conditions such as; gastrointestinal bleeding, dilatation of the strictures, extraction of gastrointestinal foreign bodies. We found the rate of esophagitis was 9.3% in our series (2.7% esophagitis alone, 2.9% esophagitis + hiatal hernia and 3.7% esophagitis + duodenitis). Esophagitis determined in 9.4% of male and 9% of female patients. Tamer et al reported a frequency of 12.5% for esophagitis in their series 1. Similarly, they found a male predominancy in patients with esophagitis (14.5% in male and 10.3% in female). Male population more frequently exposure to environmental factors predisposing reflux such as smoking and alcohol consumption.

We found the rate of bile reflux 7.3% in our study (6.2% in male and 8.1% in female patients). Bile reflux has been described as a predisposing factor in development of Barrett esophagus, a consequence of treatment resistant esophagitis² Although, esophagitis was slightly more common in male patients, on the contrary, female patients suffered from bile reflux more frequently in our study. A previous study reported the rate of bile reflux at 23.4% (25% in female and 21.6% in male patients)¹

We found that gastritis was the most common diagnosis in upper endoscopy in patients with gastrointestinal symptoms. Prevalence of gastritis may be as high as 50-60% in adult population in developed regions³. A study in literature reported that gastritis was the most common diagnosis in upper endoscopy series with a rate of 64.4%⁴. Prevalence of Helicobacter Pylori is about 70-90% in patients with chronic gastritis⁵. High rate of helicobacter pylori infection may be an explanation of that why gastritis was the most common diagnosis in upper endoscopies. Despite effective helicobacter pylori eradication treatment is available;

gastritis is still the most common lesions in endoscopies.

We found incidence of gastric polyp 1%. Some reports found that gastric polyp incidence was 1.2%⁶. Reports from Turkey reported the incidence of gastric polyp was 1.5-1.8%.

We found the incidence of gastric and duodenal ulcer 5.7% and 6.8%, respectively. Frequency of gastric and duodenal ulcer reported in literature between 2- 15% . Duodenal ulcer was more common than gastric ulcer in our case series. This finding was compatible with literature.

Esophageal and gastric carcinoma rates in endoscopy series reported between 0.2-0.4% and 0.5-2.4% . In Şimşek et al's study, it is reported that, the rates of esophageal and gastric carcinomas 0% and 4%, respectively¹¹. The rates of esophageal and gastric carcinomas in another study have been reported as <1% and 2.2%, respectively⁴ Similar to the literature, we found the rate of esophageal and gastric carcinomas 1% and 1.7%, respectively.

Upper endoscopy was normal in 4.6% of the patients in our series. Normal endoscopy was reported about 20-37% in previous reports¹². Rate of normal endoscopy reported 6% in subsequent studies¹³. We performed endoscopy in selective cases that upper endoscopy was indicated. Therefore, rate of normal endoscopies was lower in our series.

CONCLUSIONS

In conclusion, although gastritis, esophagitis and bile reflux, which are benign conditions, were common diagnosis in our series, endoscopy should not be delayed in symptomatic patients, because, according to our findings, 2 or 3 of every 100 patients undergone endoscopic examination may have malign tumors in upper gastrointestinal system. Upper gastrointestinal

malignity, especially gastric adenocarcinoma is the second cause of cancer deaths worldwide and have a poor prognosis. Therefore, endoscopy in time can be a life saver for scuh patients.

REFERENCES

1. Tamer A, Korkut E, Korkmaz U, Akcan Y. Üst gastrointestinal endoskopi sonuçları: Düzce bölgesi. Kocatepe Tıp Dergisi. 2005; 6: 31-4.
2. Fujiwara Y, Higuchi K, Yamamori K, Watanabe Y, Shiba M, Watanabe T, et al. [Pathogenesis and treatment of refractory gastroesophageal reflux disease in Japanese patients]. Nihon rinsho Japanese journal of clinical medicine. 2004; 62: 1510-5.
3. Perez-Perez GI, Dworkin BM, Chodos JE, Blaser MJ. Campylobacter pylori antibodies in humans. Annals of internal medicine. 1988; 109: 11-7.
4. Demir A, Bahçecioğlu İ, Çelebi S. Fırat Üniversitesi Tıp Fakültesi Hastanesinde yapılan 12022 üst gastrointestinal sistem endoskopisinin değerlendirilmesi. The Turkish J Gastroenterology. 1999; 10.
5. Graham DY, Malaty HM, Evans DG, Evans DJ, Jr., Klein PD, Adam E. Epidemiology of Helicobacter pylori in an asymptomatic population in the United States. Effect of age, race, and socioeconomic status. Gastroenterology. 1991; 100: 1495-501.
6. Archimandritis A, Spiliadis C, Tzivras M, Vamvakousis B, Davaris P, Manika Z, et al. Gastric epithelial polyps: a retrospective endoscopic study of 12974 symptomatic patients. The Italian journal of gastroenterology. 1996; 28: 387-90.
7. Güllüer S, Keleş H, Özkurt ZN. Kırıkkale Üniversitesi Tıp Fakültesi İç Hastalıkları Kliniği Üst Gastrointestinal Sistem Endoskopi Sonuçları. KU Tıp Fak Derg. 2004; 6: 10-2.
8. Onuk M, Okçu N, Akarsu E. Gastrik polipler. Gastroenteroloji. 1994; 5: 248-50.
9. Yılmaz N, Bölükbaş C, Bölükbaş F. Üst gastrointestinal endoskopi bulgularımız; Harran Üniversitesi. Turk J Gastroenterol. 2003; 14: 198.
10. Özer B, Coşar A, Serin E, Gumurdulu Y. Endoskopi endikasyon ve tanı oranlarımız. Turk J Gastroenterol. 2003; 14: 251.
11. Simsek H, Telatar H, Karacadağ S, Kayhan B, Batman F. Upper gastrointestinal endoscopy in Turkey: a review of 5,000 cases. Gastrointestinal endoscopy. 1988; 34: 68-9.
12. Yenice N, Goral V, Toprak N, Degertekin H, Canoruc F, Birimi DG. Kliniğimizde Son Altı Yılda Yapılan Üst Gastrointestinal Sistem Endoskopi Sonuçlarının Değerlendirilmesi. Endoskopi 1992; 1: 3-7
13. Koruk M, Polat G, Mehmet Derya O, Yılmaz A. Upper Gastrointestinal Endoscopy Results In Erzurum Area. MJAU 1999; 31: 117-120.