Early Period Results and Clinical Characteristics of Upper Gastrointestinal Endoscopy in Sivrihisar State Hospital

Sivrihisar Devlet Hastanesinde Üst Gastrointestinal Endoskopi Erken Dönem Sonuçları ve Klinik Özellikleri

Endoscopy Results of Sivrihisar State Hospital

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Özet

Amaç: Amacımız yeni endoskopi ünitesi kurulmuş olan bir devlet hastanesinde üst gastrointestinal endoskopi yapılmış olan hastaların özelliklerini belirlemektir. Hastanemiz bölgesindeki gastrointestinal hastalıklarının spektrumunu ortaya koymak istedik. Gereç ve Yöntem: Üst gastrointestinal endoskopi yapılan hastaları endoskopi sonuçları, yaş, cinsiyet, şikâyetleri, klinik özellikleri, anestezi tipi, biyopsi gerekliliğine göre analiz ettik. 2013 Aralık-2014 Temmuz arasında 256 hastayı değerlendirdik. Tüm endoskopiler aynı cerrah tarafından yapılmıştır. Bulgular: En fazla karşılaşılan şikâyet epigastrik ağrıydı (n=112, %43. 8). Diğer şikayetler dispepsi (n=84, %32.8), retrosternal yanma (n=42 %16.4) , bulantı (n=4, %1.6) , kusma (n=2, %0.8), disfaji (n=6, %2.3) olarak belirlendi. Hastalarda 218 gastrit (%85.2), 120 özefajit(%46.9),76 duedonit(%29.7), 64 hiatal herni(%25), 18 duedonal ülser(%7), 4 gastrik ülser(%1.6), 20 alkalen safra reflüsü(%7.8), 26 Gastroözefagial reflü (GÖR), (%10.2) tespit ettik. 10 hasta normal olarak değerlendirildi. Hastaların 186'sından biyopsi alındı. Tartışma: Endoskopinin erişilebilirliğinin arttırılması ile bir erken tanı tetkiki haline gelebilir. Ayrıca alarm semptomları göz ardı edilmemeli ve semptomatik olan hastalarda derhal endoskopi yapılmalıdır. Bu çalışmada yapılmış olan üst gastrointestinal sistem endoskopilerinin bir sonucu olarak gastrit, özefajit, duodenit ve hiatal herni bizim bölgemizde sık karşılaşılan gastrointestinal hastalıklardır.

Anahtar Kelimeler

Gastrointestinal Endoskopi; Devlet Hastanesi; Endoskopi Sonuçları

Abstract

Aim: Our aim was to identify the characteristics of the patient that performed upper gastrointestinal endoscopy in a new established endoscopy unit of a state hospital. We want to present the spectrum of gastrointestinal diseases in our hospitals region. Material and Method: We analyzed patients upper endoscopy results according to age, sex, complaints, clinical characteristics, type of anesthesia, and the necessity of biopsy. We reviewed 256 patients data between 2013 December-2014 July. All endoscopies were performed by same surgeon. Results: The highest complaint was epigastric pain (n=112, 43, 8%). Other complaints were followed as dyspepsia (n=84, 32.8%), heartburn (n=42, 16.4%), nausea (n=4, 1.6%), vomiting (n=2, 0.8%), dysphagia (n=6, 2.3%). We determined 218 gastritis (85.2%), 64 hiatal hernia (25%), 120 esophagitis (46.9%), 76 duodenitis (29.7%), 4 gastric ulcer (1.6%), 18 duodenal ulcers (7%), 20 bile reflux (7.8%), 26 Gastro esophageal reflux disease (GERD) in patients (10.2%). 10 patients reported as normal (3.9%). Biopsy was performed in 186 of the patients. Discussion: Endoscopy can become an early diagnostic examination by increasing the availability of endoscopy. Also alarm symptoms should not be ignored and endoscopy should perform immediately in symptomatic patients. As an early result of upper gastrointestinal endoscopies that performed in this study; gastritis, esophagitis, duodenitis and hiatal hernia are common gastrointestinal diseases in our region.

Keywords

Gastrointestinal Endoscopy; State Hospital; Endoscopy Results

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Introduction

Upper gastrointestinal endoscopy is usually used in the diagnosis of diseases such as GERD, esophagitis, gastric ulcer, bulber ulcer, bile reflux, gastritis and gastric cancer. Endoscopy is a gold standard diagnosis method in gastrointestinal diseases. The most common symptoms of the upper gastrointestinal system are heartburn, dysphagia, bleeding, anemia, epigastric pain, weight loss, nausea and recurrent vomiting. Endoscopic examination of the upper gastrointestinal system is the best and most commonly used diagnostic method because of biopsy can be performed at the same time of diagnosis of the lesion. Also during the same seance of process treatment methods such as polypectomy, stenting, endoscopic mucosal resection and Sclerotherapy can be performed. This study is a result of a new endoscopy unit of a state hospital. Results of the study will elucidate the spectrum of gastrointestinal diseases in our hospitals region.

Material and Method

In this study, we analyzed 256 Patients data during a period between 2013 December-2014 July in Sivrihisar State hospital surgical endoscopy unit. All of endoscopies were performed by the same surgeon. Indications to request upper gastrointestinal endoscopy were epigastric pain, heartburn, nausea, vomiting, dysphagia, anemia, hematemesis, maelena, and presence of gastric cancer in the family history, weight loss. All patients were analyzed retrospectively according to endoscopy result, age, sex, complaints, clinical characteristics, type of anesthesia, necessity and results of biopsy, Helicobacter Pylori results. Complaints of the patients are classified through the endoscopy request form used at the hospital. Patients did not ingest food and water before six hours of the endoscopic procedure. Anesthesia method was chosen considering the clinical status and concomitant diseases of patient. Xylocaine spray used for topical oropharyngeal anesthesia five minutes before esophagogastroduodenoscopy. Midazolam and propofol used alone or combined. Flumazenil was kept at the ready to use for reversing midazolam sedation. Upper gastrointestinal endoscopies were performed by Olympus Actera CV-150 Processors and GIF-Q150 endoscope (Olympus Corporation; Tokyo, Japan). Biopsy was taken only cases gastric lesion observed and doubt of Helicobacter pylori infection. Helicobacter pylori were diagnosed by histophatological examination. Biopsy tissue was fixed in %10 formalin solution than paraffin embedded for the standard tissue process. Analysis of statistical data was performed with the statistical software SPSS 15.0 for Windows (SPSS, Inc, Chicago, IL, USA).

Results

Patients symptoms were identified by filling out the endoscopy request form at the admission. We statistically evaluated endoscopy request forms. The highest complaint was dyspepsia epigastric pain (n=112, 43.8%).There was a female dominancy in epigastric pain (Figure 1). Other complaints were followed as dyspepsia (n=84, 32.8%), heartburn (n=42, 16.4%), nausea (n=4, 1.6%), vomiting (n=2, 0.8%), dysphagia (n=6, 2.3%), anemia (n=2, 0.8%), weight loss (n=2, 0.8%) and presence of gastric cancer in the family history (n=2, 0.8%), (Table 1). Sedation anesthesia with midazolam preferred in 220 patients, 36 patients had midazolam combined with propofol. A total 256 patients, 160 female and 96 male admitted to the study. Mean age of female patients was 48.1±17.1 years and 48, 3±14, 2 years for male patients (Mean age of all patients were 48. 2±16).The most frequent diagnosis was gastritis with 218 (85. 2%) patients. There was a male dominancy in patients with gastritis (Figure 2). Endoscopic diagnoses of patients are seen in Table 1. Esophagitis diagnosed 120 (46. 9%) patients and 64(25%) of these patients also had a hiatal hernia. Frequency of duodenitis (n=76; 29.7%) was more than duodenal ulcer (n=18, 7%). Gastric ulcer was identificated only in 4 patients, gastric carcinoma identificated only in two patients (0. 8%) and while esophageal carcinoma had not seen as expected. Gastric polyp diagnosed in four patients (1. 6%). In 20 (7. 8%) patients

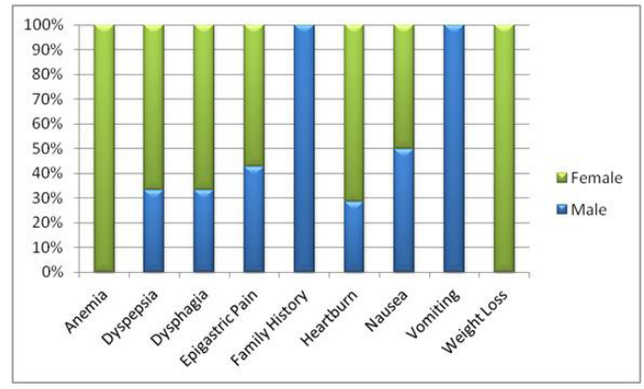


Figure 1. Distribution of symptoms by gender.

Table 1. Symptoms of the patients

	Male	Female	Total
Anemia	-	2 (1,3%)	2 (0,8%)
Dyspepsia	28 (29,2%)	56 (35%)	84 (32,8%)
Dysphagia	2 (2,1%)	4 (2,5%)	6 (2,3%)
Epigastric Pain	48 (50%)	64 (40%)	112 (43,8%)
Family History	2 (2,1%)	-	2 (0,8%)
Heartburn	12 (12,5%)	30 (18,8%)	42 (16,4%)
Nausea	2 (2,1%)	2 (1,3%)	4 (1,6%)
Vomiting	2 (2,1%)	-	2 (0,8%)
Weight Loss	-	2 (1,3%)	2 (0,8%)
Total	96	160	256

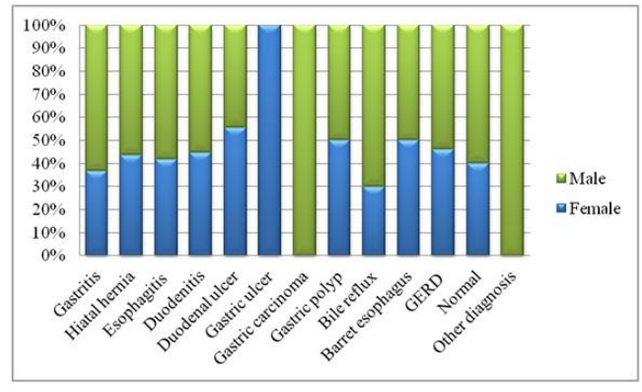


Figure 2. Distribution of endoscopic diagnosis by gender.

bile reflux from duodenum observed during an endoscopy procedure. Barret esophagus has occurred at the distal part of the esophagus in 4 (1.6%) of patients through 26 (10.2%) patients GERD identified. 10 patients were evaluated as normal (3.9%), (Table 2, Figure 3). Distribution of the frequency of diagnosis

Table 2. Endoscopic diagnosis results

Endoscopic diagnosis	Female	Male	Total
Gastritis	80 (83,3%)	138 (86,3%)	218 (85,2%)
Hiatal hernia	28 (29,2%)	36 (22,5%)	64 (25,0%)
Esophagitis	50 (52,1%)	70 (43,8%)	120 (46,9%)
Duodenitis	34 (35,4%)	42 (26,3%)	76 (29,7%)
Duodenal ulcer	10 (10,4%)	8 (5,0%)	18 (7,0%)
Gastric ulcer	4 (4,2%)	-	4 (1,6%)
Gastric carcinoma	-	2 (1,3%)	2 (0,8%)
Gastric polyp	2 (2,1%)	2 (1,3%)	4 (1,6%)
Bile reflux	6 (6,3%)	14 (8,8%)	20(7,8%)
Barret esophagus	2 (2,1%)	2 (1,3%)	4 (1,6%)
GERD	12 (12,5%)	14 (8,8%)	26 (10,2%)
Normal	4 (4,2%)	6 (3,8%)	10 (3,9%)
Other diagnosis	-	2 (1,3%)	2 (0,8%)

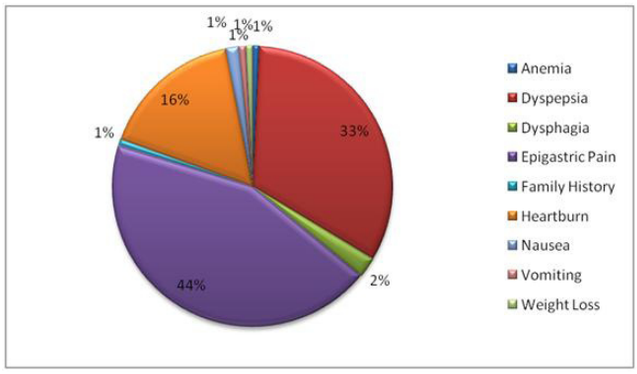


Figure 3. Frequency of symptoms of the patients.

according to the final result was shown in Figure 4.Biopsy performed in 186 patients (72.7%). All of endoscopies were elective, there was no urgent case.

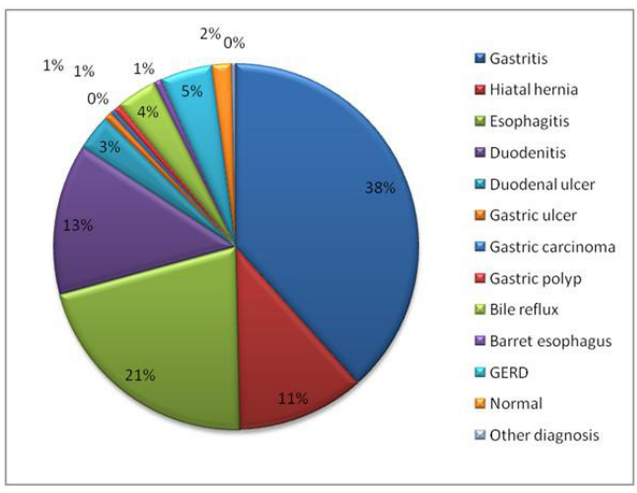


Figure 4. Endoscopic diagnosis frequencies of the patients according to final diagnosis.

Discussion

Endoscopy is an effective and reliable method in the diagnosis of gastrointestinal diseases. Endoscopy is a well tolerated procedure and does not increase the risk of complication [1]. Cause of many gastrointestinal symptoms can explain during an endoscopy procedure. Besides diagnosis, therapeutic procedures like as polypectomy, hemostasis, dilatation, gastrostomy, stenting and biopsy can be performed. Indications for endoscopy listed digestive symptoms as epigastric pain, heartburn, nausea, vomiting, dysphagia, anemia, hematemesis, maelena, and presence of gastric cancer in the family history, weight loss [2]. The most common symptom was dyspepsia in the patients who underwent endoscopy in literature Fong et al. Described dyspepsia as an alarming symptom of necessity endoscopy referral [3]. We used sedation anesthesia for all patients. Patient comfort and tolerance are increased. There was no patient that cannot complete endoscopy. Before the endoscopy 2-6 mg midazolam administrated intravenously, in cases where the patients not tolerated 2-8 mg propofol applied intravenously. During the procedure, peripheral saturation was followed to prevent respiratory complications [4]. When adequate doses of midazolam and propofol used for sedation during endoscopy procedure is safer [5,6]. The most of patients who was performed endoscopy had dyspeptic complaints and epigastric pain. These patients endoscopies resulted as gastritis and esophagitis in accordance of their complaints. Aoki et al reported prevalence of gastritis diagnosed with endoscopy from 23% to 96.5% [7]. We found the rate of gastritis 85, 2% in our study. In another study the rate of gastritis reported 64.4% [8]. Hiatal hernia rate was 25% in this study compatible with the literature [9]. Some of the studies published fromTurkey reported prevalence of hiatal hernia between 14.6% and 16.6% [10, 11]. We found the rate of esophagitis 46.9% nearly some studies in literature. Duodenitis rates found as 29.7% higher compared to other studies. Duedonal ulcer was diagnosed only in 18 patients (7%). The incidence of gastric ulcer was found 2.4% in a large study in Netherlands. We found the incidence of gastric ulcer 1.6%. We performed a control endoscopy four weeks later, following medical treatment. These control endoscopies excluded from the statistical analysis [12,13]. In different studies of upper endoscopy incidence of gastric cancer reported as 0.2-2.5%. We found the frequency of gastric cancer 0.8% similarly in literature [8]. We did not diagnose any esophageal malignancy. We reported only four cases of gastric polyp and performed polypectomy at same seance of endoscopy procedure. The gastric polyp incidence reported 1% around Turkey [10,14]. Gastric polyp frequency was similar with literature. Bile reflux rate was 7.8% in this study. In recent study bile reflux rate was stated 7.3% [10]. In the region of our state hospital bile reflux rate was higher than the literature [14]. Barret esophagus was seen in four cases that have esophagitis and GERD at the same time. Frequency of Barret esophagus calculated as 1.6%. In this study 3.9% of patients were normal. The rate of normal endoscopy was reported 6% in recent studies. As an early result of upper gastrointestinal endoscopies that performed in this study; gastritis, esophagitis, duodenitis and hiatal hernia are common gastrointestinal diseases in our region. Nearly one patient in a hundred has a gastric malign tumor in our endoscopy

series. Endoscopy can become an early diagnostic examination by increasing the availability of endoscopy. Also alarm symptoms should not be ignored and endoscopy should perform immediately in symptomatic patients.

Competing interests

The authors declare that they have no competing interests.

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