# Gastroscopy results in a private surgical diagnostic center Bir özel cerrahi tanı merkezi gastroskopi sonuçları

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# ÖZET

**Amaç:** Bu çalışmada İstanbul Fatih ilçesinde özel bir cerrahi tıp merkezinde 2016 yılında yapılan üst gastrointestinal sistem endoskopi tetkiklerinin sonuçlarını değerlendirmeyi amaçladık.

**Yöntemler:** Değerlendirmeye 497 (K=222, E272) hastanın endoskopi incelemesi alındı. Hastaların yaş ortalaması 47,8±15,4 idi. Endoskopik incelemeler GİF-xQ30 olympus marka cihaz ile yapıldı. Endoskopik bulgular retrospektif olarak değerlendirildi.

**Bulgular:** Hastaların 462'sinde (%93.1) gastrit, 74 ünde (%14.9) bulbit,47 sinde (%9.5)özefajit, 63 ünde(%12.7)ülser, 36 sında (%7.3) duodenit, 13 ünde (%2.6)polip, 4 ünde (%0.8) kanser, 2 sinde (%0.4) varis bulundu. Ülser, bulbit, özefajit oranı erkek cinsiyette kadın cinsiyete göre istatistiksel olarak anlamlı yüksek saptandı. (p=0,010 p=0,017 p=0,026).

**Sonuç:** Gastrit, bulbit ve ülser görülme oranı sıktır. %9.5 oranında özefajit görülmesi gastroözefagial reflü hastalığının toplumda yüksekliğini göstermektedir. Ülser, bulbit ve özefajit erkeklerde kadınlardan daha yüksek oranda görülmüştür. Dispeptik şikayeti olan hastalardan geçikme olmadan endoskopik tetkik istenmelidir.

**Anahtar Kelimeler:** Üst gastrointestinal sistem, endoskopi, retrospektif

# SUMMARY

**Aim:** The aim of the present study was to evaluate the results of upper gastrointestinal system endoscopy investigations carried out in a private surgical medicine center in Fatih in istanbul in 2016.

**Methods:** Endoscpic investigations of 497 (F=222, M272) patients were evaluated. The age range of the patienents vas  $47,8\pm15,4$ . Endoscopic investigations were carried out with GiF-xQ30 olympus device. Endoscopic findings were evaluated retrospectively.

**Results:** Endoscpic investigations of 497 (F=222, M272) patients were evaluated.462 patients were found to have gastritis (%93.1), 74 (%14.9) bulbitis,47 (%9.5)oesephagitis, 63 (%12.7) ulcer, 36 (%7.3) duodenitis ,13 (%2.6)polyp, 4 (%0.8) cancer and 2 (%0.4) varice. The rates of ulcer, bulbitis, and oesephagitis were found to be significantly higher in males than in females. (p=0,010 p=0,017 p=0,026).

**Conclusion:** Gastritis, bulbitis and ulcer occur quite frequantly. The detection of oesephagitis at the rate of %9.5 indicates the high prevalence of gastrooesephagal reflux disease in the community. Ulcer, bulbitis and oesephagitis occur at a higher rate in males than in females. In patients with dyspeptic complaints, endoscopic investigation should be ordered without delay.

**Keywords:** Upper gastrointestinal system, endoscopy, retrospective

# INTRODUCTION

Difficulty in swallowing, pyrosis, epigastric pain, nausea and vomiting are commonly occurring upper GIS complaints. These symptoms may originate from functional diseases. However, they may also be harbinger of more serious diseases(1). Therefore, it is important to carry out necessary examinations and investigations rapidly and to rapidly determine the pathology causing symptoms. Endoscopic investigation is the best diagnostic method in the evaluation of upper gastrointestinal system diseases. It is possible to examine lesions macroscopically, to obtain biopsy and if necessary to perform treatment procedures simultaneously, using endoscopy (2-5).

Endoscopy allows the procedures of biopsy, polyp excision, control of bleeding and upper GIS bleeding, and percutaneous endoscopic gastrostomy (PEG). The aim of the present study was to evaluate the results of gastroscopy investigations carried out in a surgical diagnostic center.

### **METHODS**

Overall 497 patients (222 female, 272 male) refriing to a surgical diagnostic center in İstanbul, Fatih in 2016 and who underwent upper gastrointestinal system endoscopic investigation were included in the present study. The age range of the patients was between 11-83.The mean age of the patients was  $47,8\pm15,4$ (M:  $48,4\pm15,3$ , F:47,0±15,7). Patients had such complaints as dyspepsia, epigastric fullness, nausea, vomiting, epigastric pain, indigestion, difficulty in swallowing, loss of weight and anemia.

Endoscopy procedures was carried out by the same surgery consultant, who was quite experienced on this issue. Procedure was explained in detail to all patients. Their informed consent was obtained. Patients fasted for at least five hours before the procedure. If necessary, sedative antispasmodic was administered. Local oropharyngeal aenesthesia was administered with Xylocain %10 spray. Investigations were carried out with GIF-xQ30 olympus endoscopy device.

Ethics Committee Approval has not taken. Because our study is retrospective.

# STATISTICAL ANALYSE

SPSS 15.0 for Windows program was used. Descriptive statistics were expressed with number and percentage for categorical variables. Difference between groups in categorical variables was evaluated with chi square analysis. Alpha significance level was set at p < 0.05.

### RESULTS

According to our findings, 462 patients (%93.1) had gastritis 74 (%14.9) bulbitis, 47 (%9.5)esophagitis, 63(%12.7) ulcer , 36 (%7.3) duodenitis ,13 (%2.6) polyp, 4 (%0.8) cancer and 2 (%0.4) varice. There was no statistically significant difference between males and females in terms of the rates of gastritis, duodenitis, varice, polyp and cancer rates. However, the rates of ulcer, bulbitis and esophagitis were significantly higher in male patients. i.e.Ulcer : M %16.2,F8.5, Bulbitis: M%12.1, F%6.3 M%18.4, F%10.7, esophagitis o (p=0,010 p=0,017 p=0,026). Table-1. Gastritis occutred more commonly in the age range of 40-60, bulbitis in 30-40 age range and osephagitis, in 60-70 age range. Table-2. No serious complications occured during procedures.

#### Table 1: Gastroscopy findings

Of gastroscopy findings, ulcer, bulbitis and of other findings osephagitis, were found to be significantly higher in male patients than female patients.(p=0,010 p=0,017 p=0,026).

			Sex				
	Overall       Mean±SD       47,8±15,4 (11-83)		Male		Female Mean.±SD 47,0±15,7 (14-78)		p 0,321
			Mean	±SD			
Age (years )			48,4±	:15,3 (11-83)			
	n	%	n	%	n	%	р
Cancer	4	0,8	2	0,7	2	0,9	1,000
Polyp	13	2,6	5	1,8	8	3,6	0,229
Varice	2	0,4	1	0,4	1	0,4	1,000
Ulcer	63	12,7	44	16,2	19	8,5	0,010
Duodenitis	36	7,3	18	6,6	18	8,0	0,545
Bulbitis	74	14,9	50	18,4	24	10,7	0,017
Gastritis	462	93,1	251	92,3	211	94,2	0,400
Osephagitis	47	9,5	33	12,1	14	6,3	0,026

(SD:standard deviation, n:patient number, p:p value)

Table 2: The distribution of gastroscopy fi	indings in different age groups
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		Age							
		10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89
Cancer	n				2	1	1		
	%				50,0	25,0	25,0		
Polyp	n			3	1	4	3	2	
	%			23,1	7,7	30,8	23,1	15,4	
Varice	n				1		1		
	%				50,0		50,0		
Ulcer	n		10	14	14	14	7	4	
	%		15,9	22,2	22,2	22,2	11,1	6,3	1
Duodenitis	n		4	6	7	8	8	3	
	%		11,1	16,7	19,4	22,2	22,2	8,3	
Bulbitis	n	2	12	21	10	14	7	7	1
	%	2,7	16,2	28,4	13,5	18,9	9,5	9,5	1,4
Gastrit	n	14	53	87	98	97	72	39	2
is	%	3,0	11,5	18,8	21,2	21,0	15,6	8,4	0,4
Osephagitis	n	1	4	7	7	7	11	9	1
	%	2.1	8.5	14.9	14.9	14.9	23,4	19.1	2.1

(n:patient number, p:p value)

# DISCUSSION

Endoscopy is the best method in the investigation of many symptoms associated with esophagus, stomach and duedonum diseases and is used commonly. It is a well tolerated ,reliable procedure. Endoscopy may sometimes be used for treatment purposes such as controlling varice and other bleeding and placing stent on malignities. In addition, dilatation of structures, and removal of foreign bodies and polyp excision can be carried out with endoscopy (6,7). In patients with oral intake problems, percutaneous endoscopic gastrostomy (PEG) is a commonly used method.

Gastritis a common finding in patients presenting with complaint such as pyrosis, nausea, vomiting , indigestion and retching. In the present study, gastritis was detected in a large majority of patients (93.1%). In a study conducted in Süleyman Demirel University, Facultyof Medicine, gastritis was detected in in 205 of 396 patients(51.7%) who underwent endoscopic examination(8). In another study by Yusuf Yücel et al in Karabük University Training and Education Hospital, gastritis was detected at the rate of 89.7% in 7703 gastroscopy procedures(9). Our results are consistent with those reported in the literature. The reason why the rate of gastritis is higher in the present study may be that mostly patients with more severe and specific complaints are referred to private diagnostic centers.

The most common site of stomach cancer is antrum and in some studies, the rate of stomach cancer varies between 0.2-7.9%.(10,11). In a study carried out in Karabük University, the rate of gastric cancer was found to be 1.4%. with a male/female ratio of 3.15/1. (9). In the present study, gastric cancer was detected in overall 4 subjects, 2 of whomwere male and two female. (%0.8).

The rate of polyps in the stomach is 1% in national scale while in the present study, it was found to be 2.6%. In the study of Günay et al, gastric cancer was diagnosed in 0.6-7.9% of patients presenting with dyspepsia(10,11). Therefore, the need for endoscopy is clear in patients presenting with simple dyspepsia

Peptic ulcer is one of the most important diseases influencing public health. Its prevalence in western societies vary between 1.5-2.5%. It is expected to be more common in societies at lower socioeconomic development (12). In the study of Ali Tamer et al with 5551 cases, peptic ulcer was detected at the rate of overall 4.6%. (5.5% in males and 3.6% in females) (13). In the present study, peptic ulcer was detected in 12.7% of all cases. (18.2% male, 8.5% female).The rate of peptic ulcer is higher in male patients. (p=0.010). These results are congruent with those of other studies

## carried out in our country.

Esophageal varice bleeding has the worst prognoses among all upper GIS bleeding(14). It is a sign of portal hypertension. In studies carried out in Kırıkkkale, Şanlıurfa, and Adana, esophageal varices were detected at the rate of 1—5.2%. (10,15,16).In the present study, esophageal varice was detected in two subjects (one male, one female).

There is no consensus on clinical diagnostic criteria of Gastroesophageal reflux disease (GERD) With the movement of acid or alkali material from stomach to esophagus, it may present with respiratory system findings in addition to findings such as pyrosis, chest pain and difficulty in swallowing caused by the disruption of the integrity of esophagus mucosa. In a questionnary study carried out in our country, 3.1% of the participants described continuous reflux symptoms, 22.6% frequent and 46.3% rare(17). In a community based study conducted by Bor et al on 630 subjects, the prevalence of GERD was reported to be 20% (18). In the study carried out by Mungan et al in 1999 with 585 participants including te provinces of İstanbul, Erzurum, Divarbakır and Malatya, it was reported that 3.1% of the cases has constant pyrosis and/or regurgitation, 22.6% frequently and 43.6% rarely (19). In the study of Ali Tamer and coworkers, esophagitis was detected in 12.5% of the cases. (M%14.5, F%10.3) (13). In the present study, esophagitis was detected at the rate of 9.5%, being 12.1% and 6.3% respectively in males and females. Considering also, the cases which can not be detected endosopically, it is obvious that esophagitis cases are quite frequent. The difference between males and females may be attributed to the fact that males are exposed more commonly to factors predisposing to reflux such as smoking and alcohol.

# CONCLUSION

Endoscopy is a quite reliable method used in the diagnosis and treatment of upper GIS diseases. Patients who present with dyspeptic complaints should undergo endoscopic investigation without much delay. Endoscopic investigation results obtained in private surgical diagnosis center were found to be similar to those of other centers. It is our suggestion that endoscopy practice should become more common and general surgeons also should carry out endoscopic investgations, which will make an important contribution to the diagnosis and treatment of patients.

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