

Upper Gastrointestinal Fiberoptic Endoscopic Experience in Turkey

K. Bahri ATEŞ, A. Remzi DALAY, Sedat BOYACIOĞLU,
M. Emin CANER, M. Enver DOLAR, Fatih HİLMİOĞLU, Burhan ŞAHİN

Summary: *In order to find out the incidences of the upper gastrointestinal tract diseases in Turkey diagnosed by esophagogastroduodenoscopy. We retrospectively analyzed 26345 elective upper panendoscopic examinations. In 26.3% of the examinations no abnormality and in 73.7 % one or more pathologies were found. The frequency of esophageal pathologies was 44.8 %. Duodenitis and duodenal ulcer together were the commonest pathologies observed. Although eating habits and alcohol consumption in Turkey are quite different from western countries, the incidences of the upper gastrointestinal tract diseases, except Barrett's esophagus, are generally similar.*

Key words : Upper gastrointestinal fiberoptic endoscopic experience

MATERIALS and METHODS

Twenty-six thousand three hundred and forty-five routine upper gastrointestinal endoscopic examinations were performed at Yüksek İhtisas Hospital, Gastroenterology Dept., Turkey between January 1986 and December 1990. Examinations were performed by trained and experienced endoscopists. Forward viewing flexible fiberoptic endoscopes were used. Patients were examined conscious, after overnight fasting in left lateral decubitus position. Topical pharyngeal anesthesia was introduced to each patient with lidocaine spray 10 minutes before the procedure. No other premedications were given. Diagnoses were based on conventional endoscopic criteria (9-11). Diagnoses of malignancies were based on histopathology.

Department of Gastroenterology, Yüksek İhtisas Hospital
Ankara-Turkey

RESULTS

Of the 26345 subjects examined, 15649 (59.4%) were males, and 10696 (40.6 %) were females. In 6925 (26.3 %) cases no abnormality was detected. Of this normal examinations, 3513 (50.7.%) were males, and 3412 (49.3%) were females. The distribution of normal endoscopies and disease states are listed in Table 1.

The most common lesions seen in esophagus were esophagites, varices and hiatal hernias; whereas in stomach gastrites, ulcers, and carcinomas and in duodenum duodenites, ulcers, and deformities were seen most. Esophagitis was equally common in both sexes. The other common pathologies, except for gastrites, were seen most in males. Some common, and some less common lesions detected on endoscopies are listed in Table 2 according to their frequencies.

Examinations could not be completed in only 243 cases (0.9%) because of the anxiety, intolerance or lack of cooperation of the patients. Hypotension due to vagal reflexes developed in 25 patients. All of these patients improved after repositioning in Trendelenburg's position. No other complications were encountered.

DISCUSSION

The epidemiological data concerning gastrointestinal diseases in our country are not sufficient. We analyzed 26345 endoscopic examina-

Table I: Distribution of patients.

	n	%	M/F
Normal	6925	26.3	3513/3412
Esophageal diseases	2766	10.5	1815/951
Stomach diseases	10478	39.8	7086/3392
Duodenal diseases	11812	44.8	7556/4256

n: number of patients

M: male patients

F: female patients

Table II: Lesions seen on endoscopic examinations.

	Esophagus		Stomach lesion			Duodenum	
	Lesion	n (%)		n (%)	Lesion	n (%)	
Common Lesions	Esophagitis	1185 (4.5)	Gastritis	7511 (28.2)	Duodenitis	5163 (19.6)	
	Varices	606 (2.3)	Ulcer	1376 (5.2)	Ulcer	3997 (15.2)	
Uncommon Lesions	Hiatal hernia	448 (1.7)	Cancer	918 (3.4)	Deformity	3761 (14.3)	
	Cancer	161 (0.6)					
Uncommon Lesions	Benign stricture	70	Leiomyoma	73	Tümör	72	
	Webb	10	V. Malformation	60	Polyp	25	
Lesions	Barrett's Esop	8	Early Ca	19	V. Malformation	6	
	Mallory-Weiss	8	Gastrocolic fist	5	Crohn's disease	3	

tions which were performed in the last 5 year period in our hospital in order to contribute the subject mentioned and to look for the frequencies of gastrointestinal diseases in our country.

In contrast to generally accepted concept, no premedications or sedatives were given to the patients except for who were extremely anxious. No difficulties or unwanted side effects were seen, and we believe that the complications of sedation (9,12) were avoided.

Of the whole group 15649 (59.4%) were males. This might be because of the fact that males apply to medical institutions more than females in Turkey. Also we think that males in our country are heavy smokers and consume much more alcohol than females.

In 26.3 percent of the patients no abnormalities were found, and the male/female ratio was 1. Normal examination rates for different

study groups are as follows: Sudan group 42%, Hacettepe University-Turkey group 34%, Saudi Arabian group 29%, and Lahey-USA group 19%(3-8).

In general, the duodenum is where pathological states are seen most (44.8%), and it is followed by the stomach (39.8%) and the esophagus (10.5%). These rates for the other

countries are given in Table 3. These differences might be due to the different oriental eating habit or less alcohol consumption.

Esophagites were the most commonly seen lesions of the esophagus; it was seen 4.5% of the whole group and in the same rate in both sexes. We saw only 8 cases of Barrett's esophagus. This state is very rare in Turkey, and we are not familiar with it. Varices were the second common lesions of esophagus with a rate of 2.3 %. Hiatal hernias were rather rare (1.7%) in our group, whereas it was somewhat higher in other studies (3-5,7).

Table III: The incidences of pathologies seen in different study groups.

Study (Reference)	Esophagus (%)	Stomach (%)	Duodenum (%)
Sudan (3)	24	10	19
Hacettepe Turkey (4)	15	20	30
Saudi Arabia (5)	26	31	31
Kuwait (6)	20	40	60
Lahey-USA (7)	31	31	19
Yük. İhtisas Turkey	10	40	45

Gastritis was observed in 28.2% of the patients. This rate is similar to Hacettepe University-Turkey, Saudi Arabian, Kuwait, and Hungarian groups (4-6,8), but more than Sudan and Lahey-USA groups (3,7). It is seen twice more in females. Gastric ulcer was seen as 13.1% of the gastric pathologies, and 5.2% of the whole. It was seen twice in males. Gastric carcinoma was detected in 3.5% of the cases. In our patient population gastric ulcer/gastric carcinoma ratio is 3/2.

Duodenitis (19.6%) and duodenal ulcer (15.2%), when considered together, constitute the most common form of diseases seen in the whole group. This high rate is similar to Saudi and western series (5,13). When duodenal ulcer is taken alone, it is less than Kuwaitian group (6), and more than Lahey-USA group (7).

In general, our results are similar to western world and we think that our survey will help us contribute to epidemiology of the upper gastrointestinal tract diseases in Turkey.

REFERENCES

1. Gibb SP, Rabanera RR: Use of gastroscope fiberoptic gastroscopy and gastric biopsy in evaluation of stomach disorders: A clinical review. *Lahey Clin Found Bull* 19:148-158, 1970.
2. Gibb SP, Tarshis A: Diagnostic endoscopy of the upper gastrointestinal tract. *Concepts Gastroenterol* 7:3-7, 1982.
3. Fedail S, Homeida M, Araba B, Ghandaur Z: Upper gastrointestinal fiberoptic endoscopy experience in Sudan. *Lancet* 2:987-989, 1983.
4. Şimşek H, Telatar H, Karacadağ S, Kayhan B, Batman F: Upper gastrointestinal endoscopy in Turkey: A review of 5000 cases (letter). *Gastrointest Endosc* 34(1):68-69, 1988.
5. Laajam MA, Al-Mafleh IA, Al-Faleh FZ, Al-Aska AK, Jessen K, Hussein J, Al-Rashed RS: Upper gastrointestinal endoscopy in Saudi Arabia: Analysis of 6386 patients. *QJM* 66:21-25, 1988.
6. Nakib BA, Radhahrishan S, Liddawi HA: The role of gastrointestinal endoscopy in a developing country. *Endoscopy* 18:37-39, 1986.
7. Gibb SP, Laney CS, Tarshis AM: Use of fiberoptic endoscopy in diagnosis and therapy of upper gastrointestinal disorders. *Med Clin North Am* 70:1307-1324, 1986.
8. Cheli R, Simon L, Aste H, Figus IA: Atrophic gastritis and intestinal metaplasia in asymptomatic Hungarian and Italian populations. *Endoscopy* 3:105, 1980.
9. Cotton PB, Williams CB: *Practical Gastrointestinal Endoscopy*. Oxford, Blackwell, 1981.
10. Blackstone MO: *Endoscopic interpretation of normal and pathologic appearances of the gastrointestinal tract*. New York, Raven Press, 1984.
11. Terminology, definition and diagnostic criteria in digestive endoscopy. *Scan J Gastroenterol (Suppl)* 103:1-74, 1984.
12. Ross WA: Premedication for upper gastrointestinal endoscopy. *Gastrointest Endosc* 35:120-126, 1989.
13. Salmon PR, Brown P, Htut T, Read AE: Endoscopic examination of the duodenal bulb; clinical evaluation of forward and side viewing fiberoptic systems in 200 cases. *Gut* 13:170,1972.