

## **EVALUATION OF LOWER GASTROINTESTINAL SYSTEM FINDINGS IN A TRAINING AND RESEARCH HOSPITAL**

### **BİR EĞİTİM ARAŞTIRMA HASTANESİNDE ALT GASTROİNTESTİNAL SİSTEM BULGULARININ DEĞERLENDİRİLMESİ**

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#### **ABSTRACT**

Patients with complaints about colorectal region refer to general surgery, gastroenterology and other outpatient clinics with an increasing frequency. Rectal bleeding, abdominal pain, unexplained anemia, changes in bowel habit, occult blood positivity in stool can be a sign of serious colon disease.

In this study, patients under the age of 65 who underwent AGIS endoscopy in the endoscopy unit of the Research and Application Hospital in Central Anatolia Region between 2015 and 2018 were examined. The data were reviewed retrospectively. 214 patients under the age of 65 were included in the study.

Colitis in 37 (17.29%), hyperplastic polyp in 38 (17.76%), tubular adenoma in 86 (40.19%), tubular adenoma in 40 (18.69%), Adenocarcinoma was detected in 13 (6.7%) of results. Tubular adenoma, tubulovillose adenoma and adenocarcinomas were more common at the age of fifties, with colitis and hyperplastic polyps detected in the mean age of forties. Adenocarcinomas were found to be more common in female sex, unlike other results.

Lower gis endoscopy has an important place in the diagnosis and treatment of colorectal cancer. In our study, in which the results of AGIS endoscopy were examined, tubular adenoma was high in individuals under 65 years of age.

**Keywords:** Tubulovillous Adenoma, Colitis, Hyperplastic Polyp

#### **ÖZET**

Kolorektal bölge (KRB) hastalıkları ile ilgili şikâyetleri olan hastalar, genel cerrahi, gastroenteroloji ve diğer polikliniklere her geçen gün sıklığı artan bir şekilde başvurmaktadır. Rektal kanama, abdominal ağrı, izah edilemeyen anemi, barsak alışkanlığında değişiklikler, gaitada gizli kan pozitifliği ciddi bir kolon hastalığı belirtisi olabilir.

Bu çalışmada 2015-2018 yılları arasında İç Anadolu Bölgesinde bulunan Araştırma ve Uygulama Hastanesi endoskopi ünitesinde, AGİS endoskopisi yapılan 65 yaşın altındaki hastalar incelendi. Veriler retrospektif olarak tarandı. 65 yaşın altında olan 214 hasta araştırma kapsamına alındı.

Olguların 37'sinde (%17,29) kolit, 38'inde (%17,76) hiperplastik polip, 86'sında (%40,19) tübüler adenom, 40'ında (%18,69) tübüvilloz adenom, 13'ünde (%6,7) adenokarsinom saptandı. Kolit ve hiperplastik polip tespit edilen yaşlar ortalama kırklı yaşlar ilen, tübüler adenom, tübüvilloz adenom ve adenokarsinomlar ellili yaşlarda daha fazlaydı. Adenokarsinomların, diğer sonuçların aksine kadın cinsiyette fazla gözlendiği bulundu.

Alt gis endoskopisi kolorektal kanser tanı ve tedavisinde oldukça önemli bir yere sahiptir. AGİS endoskopisi sonuçlarının incelendiği çalışmamızda 65 yaş altı bireylerde tübüler adenom yüksek orandadır.

**Anahtar Kelimeler:** Tübülovilloz Adenom, Kolit, Hiperplastik Polip

## INTRODUCTION

Patients with complaints about colorectal region (CRB) refer to general surgery, gastroenterology and other outpatient clinics with an increasing frequency. Rectal bleeding, abdominal pain, unexplained anemia, changes in bowel habit, occult blood positivity in stool can be a sign of serious colon disease. The necessary examinations and tests should be done as soon as possible and the pathologies that cause the symptoms should be determined. These pathological findings reduce the morbidity and mortality rates in colorectal cancers with the early diagnosis and treatment feature of endoscopy. According to epidemiological studies, colorectal cancers are in the 3rd rank in cancer incidence and deaths from cancer in the United States, and among the top 5 most common cancers in our country (1-2). Endoscopic procedures are difficult, require sedation, and can cause severe complications. However, it is defined as the gold standard in lower gastrointestinal system disorders. As with all cancers, colorectal cancers are affected by genetic predisposition, health behavior and the presence of other cancer-related diseases. This situation may require the endoscopic procedures recommended at the age of 50 to be applied at an earlier age. Studies show that colon cancers are very common not only in older ages but also in younger age groups (3,4). Increasing public awareness of health and advances in diagnostic tests push healthcare providers to a higher awareness of colon diseases (1,5-6).

In this study, it was aimed to evaluate the demographic characteristics and pathology results of patients who underwent lower gastrointestinal system (AGIS) endoscopy in Yozgat Bozok Research and Practice Hospital.

## MATERIAL AND METHODS

In this study, data of patients under the age of 65 who underwent lower gastrointestinal endoscopy in the endoscopy unit of Yozgat Bozok University Research and Application Hospital between 2015 and 2018 were retrospectively analyzed. The data were scanned retrospectively from the archive. Files and reports of 214 patients who underwent endoscopic biopsy were evaluated. Cases with suspicious results were excluded. Descriptive statistics (number (%), mean  $\pm$  standard deviation (minimum-maximum) values) were used when grouping the results according to age and gender in SPSS 16 computer environment.

### Ethical Aspect of the Research

Ethics committee approval was obtained before starting the study (Bozok University Rectorate Clinical Research Ethics Committee, decision no: 2017-KAEK-189 \_2018.07.11\_03).

## RESULTS

The mean age of 214 patients included in the study was  $50.8 \pm 10.5$  (min: 18, max: 64) years. 115 (53.74%) of the patients were male and 99 (46.26%) were female. Mean age of men and women were  $50.46 \pm 10.31$  and  $51.24 \pm 10.18$  years, respectively. When the endoscopic biopsy results were evaluated, colitis in 37 (17.29%), hyperplastic polyp in 38 (17.76%), tubular adenoma in 86 (40.19%), tubular adenoma in 40 (18.69%) patients. adenoma, adenocarcinoma was detected in 13 (6.7%) (Table 1.)

The distribution of pathological findings detected at the end of the endoscopic examinations of the patients included in the study is shown in Table 1.

**Table 1.** Endoscopic biopsy results

<b>Biopsy Results</b>	<b>n</b>	<b>%</b>
Colitis	37	17,29
Hyperplastic Polyp	38	17,76
Tubular Adenoma	86	40,19
Tubulovillose Adenoma	40	18,69
Adenocarcinoma	13	6,07
Total	214	100,00

Endoscopic biopsy results of the patients were evaluated according to age and gender. The average age of those diagnosed with colitis is  $45.92 \pm 11.60$  (18 (48.65%) women, 19 (51.35) male)  $48.74 \pm 13.49$  (16 (42.11) female, 22 (57.89) male) of those diagnosed with hyperplastic polyps, of those diagnosed with tubular adenoma,  $53.15 \pm 9.75$  (38 (44.19) women, 48 (55.81) men), of those diagnosed with tubular adenoma,  $52.47 \pm 8.78$  (19 (47) , 50) women, 21 (52.50) male),  $50.46 \pm 9.19$  (8 (61.54) female, 5 (38.46) male) of those diagnosed with adenocarcinoma (Table 2.).

**Table 2.** Distribution of endoscopic biopsy results by age and gender of patients.

Biopsy Results	Women		Men		The average age	Average Age of Women	Average Age of Male
	n	%	n	%			
Colitis	18	48,65	19	51,35	$45,92 \pm 11,60$	$47,00 \pm 11,03$	$44,89 \pm 12,34$
Hyperplastic Polyp	16	42,11	22	57,89	$48,74 \pm 13,49$	$51,75 \pm 11,79$	$46,54 \pm 11,80$
Tubular Adenoma	38	44,19	48	55,81	$53,15 \pm 9,75$	$52,57 \pm 10,53$	$53,60 \pm 9,17$
Tubulovillose Adenoma	19	47,50	21	52,50	$52,47 \pm 8,78$	$53,00 \pm 7,28$	$52,00 \pm 10,11$
Adenocarcinoma	8	61,54	5	38,46	$50,46 \pm 9,19$	$49,25 \pm 10,23$	$52,40 \pm 7,89$
Total	99	46,26	115	53,74	$50,83 \pm 10,52$	$51,24 \pm 10,18$	$50,46 \pm 10,31$

## DISCUSSION

The course of IBDs varies greatly from patient to patient. The onset of the disease, the degree of involvement, the age of the patient at the time of diagnosis, accompanying diseases affect the degree and course of IBD. Screening is especially important for patients diagnosed with inflammatory bowel disease at a young age. While colitis can sometimes have very superficial effects in the intestines, sometimes it can involve all layers of the intestine. Although the mechanisms involved in the etiopathogenesis of IBD have not been fully clarified, there are findings that various environmental factors (immunological, infectious, genetic and allergic) have roles. In order to investigate the mechanisms involved in pathogenesis, acute and chronic inflammation models have been developed using different agents in experimental animals. The rate of active colitis found in our study is similar to that of Kars province (7). In both provinces, it started to be seen in the forties and was higher in males. As in a study conducted in Sakarya, the rate of colitis is higher in men in our study (8). The majority of CRCs develop on the basis of

adenomatous polyp. Purpose in screening; To detect and remove adenomatous polyps in the early period, thus preventing the development of cancer, and reducing morbidity and mortality related to cancer. In the guidelines published for follow-up, it is recommended to perform normal colonoscopy evaluation especially for small rectal hyperplastic polyps (9,10).

In our study, the rate of hyperplastic polyp was 17.76%, this ratio was found to be 9% in Erzurum, 11.1% in Elazığ and 16.6% in İzmir (11-13). The most common type of polyp in the colon are hyperplastic polyps (9). It was seen in the forties in our study under the age of 65. This difference may be due to the fact that although hyperplastic polyps are seen in all age groups, they are often noticed in screenings performed at advanced ages. Studies have shown that hyperplastic polyps are seen at a higher rate in men, and our study is compatible with the literature (7,14-16).

Although the incidence of colorectal cancer is low under the age of 50, it develops within 10 years on an adenoma background (17). In our study, adenoma incidence rates were 40.9% for tubular adenoma and 18.69% for tubular adenoma, and it was higher in men in their fifties. In Kırşehir, these rates are respectively 42.5% and 9.6% (18). Similarly, in studies conducted in Kars and Ordu, the gender distribution of tubular and tubulovillous adenomas were examined and it was found to be higher in men (7,19).

The vast majority of colon tumors are adenocancers. The rate of adenocarcinoma in our study was 6.07%, and this rate was found as 23.3% in Kırşehir and 3.8 in Düzce (18,20). The higher incidence of adenocarcinomas in women and women in their fifties is a finding that is consistent with the literature.

## CONCLUSION

In our study, in which the results of Lower Gastrointestinal System endoscopy were examined, tubular adenoma was high in individuals under 65 years of age. When the findings were compared by gender, the rate of adenocarcinoma was higher in women than men; colitis, hyperplastic polyps, tubular and tubulovillous adenomas are more common in men. It is known that there are regional differences in colorectal cancers. For this reason, we think that the findings obtained in our study can shed light on healthcare professionals in determining an approximate risk for the province of Yozgat.

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