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## Research Article

Questioning the presence of anal symptoms in patients applying to the family medicine outpatient clinic

Aile hekimliği polikliniğine başvuran hastalarda anal semptom varlığının sorgulanması

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## **Abstract**

**Introduction**: Patients usually hide anal region diseases due to the sensitivity of the anal area. Questioning and successfully managing anal region disease symptoms in primary care will prevent late diagnosis of underlying diseases. This study aims to investigate the presence of anal symptoms in patients admitted to family medicine outpatient clinics for any reason.

**Methods**: Our research is a descriptive study. A questionnaire form was created by scanning the literature, was applied by 5 different research assistants to patients aged 18 and over who applied to the family medicine outpatient clinic. It is aimed to reach the maximum number of individuals with the improbable sample.

**Results**: 64.8% of the 165 participants included in the study are female, and 35.2% are male, with a mean age of  $35,69 \pm 14,53$  (Min:18, Max:75). Anal symptoms were detected in 46 patients (27.9%) after questioning. The most frequently reported symptoms were constipation with a rate of 14.5% (n=24), rectal pain at a rate of 7.9% (n=13), rectal bleeding at a rate of 7.3% (n=12), rectal swelling at a rate of 5.5% (n=9) and rectal itching at a rate of 3.6% (n=6). 81.8% of these patients reported that they could share with their doctor when they have symptoms of moderate severity and above. 86.1% (n=142) said they would accept digital rectal examinations if necessary.

Conclusion: It is crucial to determine the prevalence of anal symptoms in the general population. Although these symptoms affect the quality of life by causing severe pain and discomfort, they are rarely shared by patients. Routine questioning and examination of anal area symptoms enable more effective disease management. The majority of cases can be diagnosed after examination in primary care. Therefore, the first step is essential for the early diagnosis and treatment of these diseases.

Keywords: Rectal Disease, Family Medicine, Digital Rectal Examination

# Öz

**Giriş**: Anal bölge hastalıkları konunun hassasiyeti nedeniyle hastalar tarafından genellikle saklanmaktadır. Anal bölge hastalık semptomlarının birinci basamakta sorgulanması ve başarılı yönetimi altta yatan hastalıkların geç teşhis edilmesini önleyecektir. Bu araştırmanın amacı herhangi bir nedenle birinci basamağa başvuran hastaların anal semptomlarının varlığını araştırmaktır.

**Yöntem**: Araştırmamız tanımlayıcı tipte bir çalışmadır. Polikliniğe başvuran 18 ve üzeri yaş hastalara 5 farklı Araştırma Görevlisi tarafından literatür taranarak oluşturulan bir anket formu uygulanmıştır. Olasılıksız örneklem ile maksimum bireye ulaşılması hedeflenmiştir.

**Bulgular**: Araştırmaya dahil edilen 165 katılımcının %64,8'i kadın, %35,2'si erkek olup, yaş ortalaması 35,69±14,53'tür (Min:18, Max:75). Sorgulama sonrası 46 hastada (%27,9) anal semptom saptandı. En çok bildirilen semptomlar %14,5 oranında (n=24) kabızlık, %7,9 oranında makatta ağrı (n=13), %7,3'ü (n=12) oranında makatta kanama, %5,5 oranında (n=9) anal şişlik ve %3,6 oranında (n=6) makatta kaşıntı idi. Bu hastaların %81,8'i orta şiddet ve üstünde bir rahatsızlık derecesinde semptomları olduğunda doktorlarıyla paylaşabileceğini belirtmiştir. %86,1'i(n=142) ise gerektiğinde anal muayeneyi kabul edeceğini söylemiştir.

Sonuç: Genel popülasyonda anal semptom prevalansının saptanması önem taşımaktadır. Bu semptomlar ciddi ağrı ve rahatsızlığa sebep olarak yaşam kalitesini etkilese de hastalar tarafından nadiren paylaşılmaktadır. Rutin anal bölge semptomlarının sorgulanması ve muayene, yönetimin daha etkili şekilde yapılmasını sağlar. Vakaların büyük çoğunluğu birinci basamakta muayene sonrası tanı alabilir. Dolayısıyla bu hastalıkların erken tanı ve tedavisi için birinci basamak önem kazanmaktadır.

Anahtar Kelimeler: Rektal Hastalık, Aile Hekimliği, Dijital Rektal Muayene

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## **Key Points**

- 1. The prevalence of anal symptoms was 27.9% in patients who applied to our family medicine outpatient clinics for different reasons.
- 2. The most common anal symptoms detected in our study were constipation, rectal pain, and bleeding.

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## Introduction

Perianal diseases are common diseases that can significantly reduce the quality of life and can be seen in many forms. Considering their high prevalence and simple medical treatment in the general population, anal diseases should be evaluated primarily in primary care [1]. However, it is difficult to determine the prevalence of diseases of the perianal region in the general population. Because anal symptoms are generally underestimated, although they affect the quality of life. At the same time, these symptoms are often hidden by patients due to reasons such as embarrassment, fear, hesitation, religious views, and cultural differences. These patients try to relieve their complaints with drugs used by others or drugs obtained from pharmacies without the doctor's knowledge [2].

Doctors also may not always ask patients about possible symptoms, and rectal examination may not be done by doctors, although it is considered necessary. The reluctance of patients, lack of time, or referral of the patient to the relevant department are among the reasons for not doing the anal examination. These reasons cause the true prevalence of anorectal diseases not to be determined [3]. Perianal disease symptoms such as pain, bleeding, discharge, and itching are common in many conditions. Although it is crucial to determine the causes of perianal symptoms, reducing the severity of these symptoms may affect the individual's work, social or private life [4]. Therefore, a clinical history should be taken for the diagnosis by making comprehensive systematic inquiries, and the diagnosis should be made with a detailed clinical examination (inspection, rectal examination) [5]. When necessary, disease management should be provided by referring patients to a higher level [6].

Doctors' knowledge of the epidemiology of the anal disease is important in increasing awareness of these diseases and the early treatment of these diseases. [7]. In this study, we aimed to determine the prevalence of anal symptoms in patients aged 18 years and older who applied to the family medicine outpatient clinic.

## Methods

## **Patient Selection and Study Design**

This research was planned as a descriptive study to determine the presence of anal symptoms in patients applying to family medicine outpatient clinic of Manisa Celal Bayar University Hospital. Our study population consists of patients aged 18 and over who volunteered to participate in the study. It is planned to enroll a maximum number of participants in this study, which was conducted during the COVID-19 pandemic. The study was terminated by 165 people who agreed to participate.

#### Ethical approval, informed consent, and permissions

Ethics Committee approval was obtained from Manisa Celal Bayar University Faculty of Medicine Health Sciences Ethics Committee (20 May 2020 – 20.478.486).

#### **Method of Data Collection**

In the study, a questionnaire form created by the researchers by scanning the literature was used. The questionnaire form consists of 16 questions in total about the sociodemographic information of the participants, smoking status, chronic disease history, daily fiber diet, symptoms in the anal region, and their status related to the management of anal region diseases. Research data were collected between June 2020 and May 2021. Data analysis and report writing started in August 2022 and ended in September 2022.

#### **Statistical Analysis**

SPSS (The Statistical Package for Social Sciences) (SPSS Inc., Chicago, IL, USA) 15.0 statistical package program was used to evaluate and analyze the data obtained from the research. Categorical variables in the study were given as a number (n) and percentage (%), and numerical data as the mean and standard deviation to show the distribution of patients. The chi-square test was used to compare categorical variables. The obtained data were interpreted with the statistical significance level "p" value. P values <0.05 were considered statistically significant.

## Results

165 of 240 applications to our family medicine outpatient clinic accepted to take part in the study. Information on the sociodemographic characteristics of the participants is given in Table 1. The mean age of the cases was 35.69±14.53 (Min: 18, Max: 75). 64.8% of the participants are women, and 46.7% of the individuals participating in the research are married. 63% of the research group are university or higher education graduates. 87.3% of them work in any job, and 67.9% do not currently smoke. 73.9% of the participants live in the city center.

When the chronic disease history of the participants was questioned, 27.3% of them were found to have one or more diseases, and the most common chronic disease was hypertension, with 9.7% (n=16). Hypertension was followed by diabetes mellitus (6.7%) (n=11) respectively.

The prevalence of anal symptoms of the participants is shown in Table 1. 14.5% (n=24) constipation, 7.9% rectal pain (n=13), 7.3% (n=12) rectal bleeding, 5.5% (n=9) rectal swelling, 3.6% (n=6) itching in the anus, 2.4% (n=4) diarrhea, 1.2% (n=2) rectal discharge and fecal contamination on underwear stated that. A total of 27.9% (n=46) of the participants had anal symptoms.

86.1% (n=142) of the participants said, "Do you agree to be examined from the rectum when necessary?" He answered "yes" to the question. 73.9% (n=122) of the participants stated that high-fiber foods are included in their daily diet.

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**Table 1.** Distribution of Participants by Sociodemographic Characteristics (n=165)

Tuble 11 Distribution of Functionals by Boeloueino	(n) (%)
Sex	( ) (: : )
Female	107 (64.8)
Male	58 (35.2)
Marital status	
Single	88 (53.3)
Married	77 (46.7)
Education status	
High School and before	61 (37)
University and beyond	104 (63)
Occupation Western Indicators	14(97.2)
Working Individual Non-working Individual (Housewife and retired)	14(87.3) 21 (12.7)
Smoking status	21 (12.7)
Yes	41 (24.8)
No.	112 (67.9)
Quitting Smoking	12(7.3)
Chronic disease status	_()
Yes	45 (27.3)
No	120(72.7)
Living status	
City Center	12(73.9)
Out of The City Center	43 (26.1)
Anal symptoms	
Yes	46 (27.9)
No	11(72.1)
Prevalence of anal symptoms	24 (14.5)
Constipation Rectal Pain	24 (14.5) 13 (7.9)
Rectal Fain Rectal Bleeding	13 (7.9)
Anal Swelling	9 (5.5)
Rectal İtching	6 (3.6)
Diarrhea	4 (2.4)
Rectal Discharge	2 (1.2)
Fecal Contamination on Underwear	2 (1.2)
Sharing the anal symptom with the doctor	
Yes	160 (97)
No	5 (3)
Status of accepting a rectal examination	
Yes	14(86.1)
No	23 (13.9)
High fiber diet	12(72.0)
Yes	12(73.9)
No	43 (26.1)

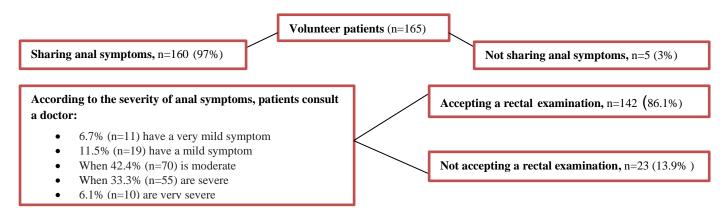


Figure 1. The cases of the participants in the presence of anal symptom

97% of the participants (n=160) stated that they could share this with their doctor when they have anal complaints. 6.7% (n=11) had a very mild symptom, 11.5% (n=19) had a mild symptom, 42.4% (n=70) had a moderate symptom, 33.3% (n=55) said that they could consult a doctor when their symptoms were severe, and 6.1% (n=10) of them had very severe symptoms (Figure 1).

**Table 2.** Comparison of presence of anal symptoms and sociodemographic characteristics

Table 2. Comparison of presence of anal s				
	Yes	No	p	
Sex				
Female	30 (28%)	7(72%)	0.951	
Male	16 (27.6%)	42 (72.4%)	0.551	
Marital status				
Married	24 (31.2%)	53 (68.8%)	0.378	
Single	22 (25.0%)	66 (75.0%)	3.6.0	
<b>Education status</b>				
High school and before	36 (29.0%)	88 (71.0%)	0.566	
University and beyond	10 (24.4%)	31 (75.6%)	0.500	
Occupation				
Working individual	37 (25.7%)	107 (74.3%)		
Non-working individual	9 (42.9%)	12 (57.1%)	0.101	
(housewife and retired)	\$ (. <b>_</b> 13,71)	( , . ,		
Smoking status				
Yes	11 (20.8%)	42 (79.2%)	0.160	
No	35 (31.3%)	77 (68.8%)	0.160	
Chronic disease status				
Yes	20 (44.4%)	25 (55.6%)	0.004*	
No	26 (21.7%)	94 (78.3%)		
Living status				
City center	33 (27%)	89 (73%)	0.600	
Out of the city center	13 (30.2%)	30 (69.8%)	0.689	
Sharing the anal symptom with the doc	etor			
Yes	44 (57.9%)	116 (42.1%)	0.520	
No	2 (40%)	3 (60%)	0.320	
High fiber diet				
Yes	32 (26,2%)	90 (73.8%)	0.426	
No	14 (32.6%)	29 (67.4%)		

<sup>\*</sup>Significant

There were any anal symptoms in 44.4% (n=20) of the participants with chronic disease and 21.7% (n=26) of the participants who did not. There is a statistically significant difference in the presence of anal symptoms between participants with and without the chronic disease (p=0.004) (Table 2).

Table 3. Comparison of sociodemographic characteristics and descriptive characteristics n (%)

	Aş	ge	Se	ex	Marita	l status	Education statu	S
	≤35	>35	Woman	Men	Married	Single	High school and earlier	University
High fiber food in d	laily diet							
Yes	67(54.9)	55(45.1)	83(77.6)	39(67.2)	63(81.8)	59(67.0)	90(72.6)	32(78.0)
No	29(67.4)	14(32.6)	24(22.4)	19(32.8)	14(18.2)	29(33.0)	34(27.4)	9(22.0)
р	0.1	52	0.149	)	0.031	*	0.489	
Sharing the anal sy	mptom with t	he doctor						
Yes	93(96.9)	67(97.1)	106(99.1)	54(93.1)	73(94.8)	87(98.9)	121(97.6)	38(95.1)
No	3(3.1)	2(2.9)	1(0.9)	4(6.9)	4(5.2)	1(1.1)	3(2.4)	2(4.9)
р	0.93	33	0.1	01	0.2	228	0.199	
The status of accep	ting rectal exa	amination wh	en necessary					
Yes	81(84.4)	61(88.4)	95(88.8)	47(81.0)	62(80.5)	80(90.9)	108(87.1)	34(82.9)
No	15(15.6)	8(11.6)	12(11.2)	11(19.0)	15(19.5)	8(9.1)	16(12.9)	7(17.1)
р	0.4	61	0.1	70	0.0	)55	0.540	
The status of anal s	ymptom treat	tment						
Yes	13(13.5)	17(24.6)	18(16.8)	12(20.7)	19(24.7)	11(12.5)	25(20.2)	5(12.2)
No	83(86.5)	52(75.4)	89(83.2)	46(79.3)	58(75.3)	77(87.5)	99(79.8)	36(87.8)
р	0.0	68	0.5	539	0.0	)43*	0.252	` ,

<sup>\*</sup>Significant \*\* Pearson Chi-Square Test was used

It was found that 81.8% (n=63) of the married participants and 67% (n=59) of the single individuals included high-fiber foods in their daily diet. The analysis revealed a statistically significant difference between married\* and single individuals in terms of their daily fiber intake (p=0.031). Moreover, 24.7% (n=19) of married individuals and 12.5% (n=11) of single individuals had undergone treatment for any anal disease in the past or present. Once again, there was a statistically significant difference between married\* and single individuals concerning the receipt of treatment (p=0.043).

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## **Discussion**

This study aimed to determine the presence of anal symptoms in individuals who applied to the family medicine outpatient clinic. Although their quality of life is mainly affected, patients do not want to share their anal symptoms or may avoid rectal examination due to cultural and social restrictions. This may result in a delayed diagnosis, and the disease becomes more complex as symptoms become chronic. For example, early detected fissures can be treated medically without sequelae, but fistulas require an anal sphincter section (fistulotomy). At the same time, delayed treatment of fissures can cause anal incontinence that is difficult to treat. [7] [8].

It is a big problem that patients do not constantly ask about possible symptoms, and examination is not routine. A routine examination is recommended only for certain diseases, such as HIV patients [9]. Regular examination and scanning are mainly done for colon cancer in our country [10]. Considering the high prevalence of anal symptoms, scanning in the family medicine outpatient clinic for other anal region diseases is essential. Severe perineal trauma, especially in labor, may have long-term consequences such as fecal incontinence and rectovaginal fistula [11] [12]. Crohn's disease should be considered, especially if there is a recurrent perianal disease [11].

Studies have shown that the prevalence of anal disorders varies between 20% and 40.5% [13]. In a study conducted by 102 adults in the Illinois region using a telephone questionnaire, the prevalence of anal symptoms was shown to be 20% [14]. Siproudhis et al. In a study conducted by him, it was found that 58.3% of the patients hid their symptoms in the anal region and did not apply at all [13]. In another study conducted with 1061 people, only 2.3% of the individuals explained that they applied with complaints of anal symptoms, while this rate increased to 15.6% after the questionnaire study [15]. Abramowitz et al. In different regions of France, this rate was 14.2%. In another study in France, it was shown that the frequency of anal symptoms was higher than the rate of admission to the family medicine outpatient clinic. People expressed their complaints at a higher rate when history was taken on this subject [2]. The prevalence of anal symptoms was 27.9% in patients who applied to our family medicine outpatient clinics for different reasons.

The most common anal symptoms detected in our study were constipation, rectal pain, and bleeding. In a similar study, these symptoms were bleeding, pain, and pruritus ani [2]. Anal symptoms detected in another study were bleeding, itching, and pain in the anal region. The diagnoses in the same study mainly were hemorrhoids, anal fissures, dermatological disorder, condyloma and anal abscess [16]. Most of our patients were treated for hemorrhoids, anal fissures, ingrown hairs, and Crohn's disease.

In a similar study, the majority of patients with anal symptoms also had gastroenterological, dermatological, cardiological, and endocrinological disorders [2]. In our study, the most common chronic diseases were hypertension, DM, hyperlipidemia, and inflammatory bowel disease.

It is crucial to consider the history of anal intercourse, trauma to the anal region, and sexually transmitted diseases in people who apply to the family medicine outpatient clinic. Sexually transmitted infections (STIs) can cause bleeding, pruritus, and discomfort. Anal intraepithelial neoplasia and anal squamous cell carcinoma are associated with sexually transmitted human papillomaviruses (especially HPV 16 and 18) [17]. Therefore anal warts must be evaluated.

## **Strengths and limitations**

Our study is unique in that there is no other study to determine the prevalence of anal symptoms in primary care in our country. The rate of participants in our study was lower than intended due to the pandemic period. This situation reduced the power of the research. In addition, it was not evaluated whether the patients were examined in the gastroenterology polyclinics after their application.

### Conclusion

Anorectal diseases are a group of diseases that can affect all age groups and both genders and are frequently encountered in primary care practices. Family physicians can easily diagnose and manage anorectal diseases with a good anamnesis and physical examination. Very few of the patients spontaneously apply to the family doctor. When targeted research is done, this rate is ten times higher. Therefore, it is crucial for the physician to question the symptoms in the perianal region and to be familiar with the epidemiology of anal disorder, even if the patient does not tell. They are questioning anal symptoms in patients who spontaneously apply to the family medicine outpatient clinic will both help to reveal the signs hidden by the patient and prevent delay in treatment by early diagnosis.

## **Conflict of interest**

Author Contributions		Author İnitials		
SCD	Study Conception and Design	TE, FO, EC, RKA, MVB HE, FO		
AD	Acquisition of Data	TE, FO, EC, RKA, MVB		
AID	Analysis and Interpretation of Data	TE, FO, EC, RKA, MVB		
DM	Drafting of Manuscript	TE, HE, FO		
CR	Critical Revision	HE, FO		

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