

Sociodemographic and Clinical Profile of Patients with Anorectal Diseases in A Tertiary Care Hospital of North India: A Cross Sectional Observational Study

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Keywords

Hemorrhoids, fissure in ano, fistula in ano, perianal abscess, Anorectal diseases.

Abstract

Background: Healthcare specialists encounter a spectrum of anorectal diseases which range from benign conditions such as hemorrhoids to more serious conditions such as malignancy. The present study aimed to study the prevalence and clinical presentation of anorectal disorders in population visiting a tertiary care centre.

Materials and Methods: The current investigation took place from August 2019 to February 2020 and was an observational cross-sectional study. All patients who complained of having anorectal issues were enrolled in the trial. After receiving their informed consent, they underwent an in-depth interview utilising a pretested structured questionnaire that centred on socio-demographic characteristics, a full physical examination, including a digital rectal examination and proctoscopy, and a detailed clinical history. For several factors, frequencies were computed. A p value of 0.05 was considered significant after data analysis.

Results: Of the total 200 cases, majority were males (n=143). A total of 97 were Fissure in ano, 60 are Hemorrhoids, rest were Abscess, Fistula, Solitary rectal ulcer syndrome (SRUS). Common disease in both males and females was Fissure in ano, followed by Haemorrhoids. Majority of the subjects complained of pain (n=133) followed by bleeding, discharge and constipation.

Conclusion: Unhealthy life style habits are causative factors leading to Anorectal disorders.

1. Introduction

Some of the most aggravating and disabling diseases entities of our population occur in the anal segments of gastrointestinal tract. Much has been written about malignant disease of this portion of the human anatomy but little is recorded in a didactic, orderly

manner about anorectal diseases.¹ Anorectal diseases are common and in most instances simple to treat, however there may be complications that are considered serious. The incidence of anorectal disorders in the primary care setting is high, although evidence of successful therapy is often lacking. Anorectal diseases afflict men and women

of all age groups. The disease spectrum of anorectal disorders ranges from benign and irritating pruritis ani to life threatening anorectal cancers. Spectrum includes haemorrhoids, anal fissure, anal tags, perianal abscess, solitary rectal ulcer syndrome, rectal polyps, rectal prolapse, carcinoma anus and rectum². Hemorrhoids' are the most common perianal problems accounting for majority of these problems. Rectal bleeding makes majority of perianal problems while anal fissure and perianal abscess comes to second. Only one-third of people with rectal bleeding seek medical advice from a surgeon. Rectal bleeding is most common in those with inadequate evacuation, as well as in people who have undergone anal canal surgery or have sustained an accident. With a thorough history and physical examination, anorectal diseases may usually be identified without the need for additional testing [3].

If a clinician suspects infectious diarrhoea or STIs, a stool microscopic examination is part of the investigation. It is necessary to perform a histopathological examination to assess the histological diagnosis of any mass or questionable area seen during a proctosigmoidoscopy or colonoscopy. Absolute methods of defining anatomy in connection to a fistula include imaging techniques like MRI and anorectal endosonography [4]. An anoscopy enables a thorough evaluation of the anal canal and distal rectum. For complete examination of anorectum, proctosigmoidoscopy is the preferred method. Any suspicious area can be biopsied. Special investigations include manometry, defecography and electromyography⁵.

Data on epidemiology and prevalence of anorectal diseases in India is lacking as the patients tend to hide their problems. The study was designed in an effort to study the prevalence and clinical presentation of anorectal disorders in population visiting a tertiary care centre.

2. Material and Methods

The current study was an observational cross-sectional study carried out at the surgery department of Santosh Medical College and Hospital in Ghaziabad for a period of six months, from August 2019 to February 2020. The study enrolled 200 patients with anorectal issues who presented to the OPD. After discussing the study's objectives,

informed consent was obtained. The subjects completed a pretested, separated into four parts, structured questionnaire. Age, education, socioeconomic position, place of residence, family structure, and occupation were the main sociodemographic factors discussed in the first section. The second part consisted of history of modifiable lifestyle factors in detail which predisposed to common anorectal problems. The third section consisted of a detailed clinical history, details of previous treatment and the last part consisted of clinical examination including Digital Rectal Examination and Proctoscopy. Ethical clearance was obtained from institutional ethical committee.

From the Performa's data was transferred to Microsoft excel sheets and was analyzed using the same. The data was described using number (proportions) and/or Mean±SD. p value <0.05 was considered statistically significant

3. Results

Of the 200 cases included in study, 143 (71.5%) were males. The mean age was 34.6 ± 1.2 years with more than half (59.5%) subjects in age groups 20 – 40 years (Table 1). About two thirds (64.7%) of the subjects had an urban residence and led a sedentary life style as most of them had office jobs (48.3%).

Table 2 depicts the various responses given by the subjects regarding the modifiable lifestyle factors.

A total of 124(62%) had pain during defecation, 92 (46%) had bleeding, rest had constipation, discharge, itching. Most common cause of pain was fissure in ano (Table 3). Most common cause of bleeding was hemorrhoids. Most common cause of perianal discharge was perianal abscess and fistula.

The most common diagnosis was fissure in ano which constituted more than half of the cases (53.5%) as shown in Chart 2.

In decreasing order of frequency most commonly treatment taken is by quacks (38.93%), then by Ayurvedic (22.13%), by surgical specialist (19.08%), by non surgical specialist (10.68%), allopathic treatment taken (0.091%).

The prevalence of infection was 18%. Commonest complications are surgical site infection followed by sphincter damage.

4. Discussion

The present study described the various risk factors and clinical profile of patients with anorectal disorders. Much has been discussed about malignant disease of this portion of the gut, but little is described about anorectal diseases. Anorectal diseases are common and in most instances simple to treat, however they may present with complications that are considered serious. The prevalence of anorectal conditions in the primary care setting is high, yet the evidence of effective therapy is often lacking.

Anorectal diseases affect men and women of all ages. The spectrum of anorectal disorders ranges from benign and irritating pruritis ani to potentially life threatening anorectal cancers. Spectrum includes hemorrhoids, anal fissure, anal tags, perianal abscess, solitary rectal ulcer syndrome, rectal polyps, rectal prolapse, carcinoma anus and rectum. Hemorrhoids are the most common perianal problem accounting for majority of these problems. Rectal bleeding makes up most of perianal problems while anal fissure and perianal abscess comes to second. Only one-third of people with rectal bleeding seek medical advice from a surgeon. Rectal haemorrhage typically happens in people with inadequate evacuation, as well as in those who have undergone surgery, suffered an anal canal injury, or both. Male patients are treated for perianal issues at a rate that is noticeably higher than female patients. Those between the ages of 25 and 44 have a risk that is much greater than patients in any other age group. Data on epidemiology and prevalence of anorectal diseases in India is lacking.

We included 200 patients in all age groups as per our study criteria. Average age of patients was 25 years (range 0 – 80 years). Male predominance was found in present study. 143 were males 57 were females. Study conducted by Emeka ray et al⁶ also studied the demographic profile of haemorrhoidal disease in 121 patients in Nigeria found similar age distribution to our study. A total of 76 were males and 45 were females aged 15 – 80 years. In present study maximum patients of anorectal disorders were

found to be below 40 years. In a study conducted by Pradeep K et al⁷ similar results were found with maximum patients below age of 40 years. Pradeep K et al also found male predominance. In a study conducted by Tessler R et al⁸ on 2695 patients also found similar results that 1941 were males and 554 were females. In decreasing order of frequency anal fissures (60%), hemorrhoids (53.5%), fistula in ano (0.075%), perianal abscess (0.035%), anal tags (0.025%) were main anorectal disorders found in our population.

In our study main symptoms include pain in perianal region (66.5%), bleeding per rectum (56.5%), discharge per rectum (0.09%), rectal prolapse (0.015%) and constipation (11.5%). Study conducted by Ismael et al⁹ found similarly that pain during defecation, was the most common symptom in study conducted on 100 patients on anal fissures. Pain during defecation was found in all 100 patients. In a study conducted by Pigot et al¹⁰ in France on 831 patients found similarly that pain during defecation was major anal symptom. Predisposing factors for anorectal diseases include fiber poor diet, weakness of connective tissue, strenuous lifting, and prolonged sitting. In our study decreasing order of frequency for causes of pain in perianal region are anal fissures (68.4%), perianal abscess (0.08%), hemorrhoids (0.11%), fistula in ano (0.06%), solitary rectal ulcer syndrome (0.01%).

According to findings in research by Ravindranath GG et al¹¹ and Khan et al¹², a higher incidence of haemorrhoids was identified in those consuming a non vegetarian diet. The lifestyle habit of eating meat was seen in a substantial number of hemorrhoid patients in the current study. One of the risk factors for haemorrhoids is insufficient fibre intake, which can be reduced by increasing dietary fibre intake to prevent constipation. According to the current survey, the majority of patients used western toilets. However, it is now understood that using an Indian toilet while sitting straightens the Anorectal angle between the rectum and anal canal, aiding the early transit of faeces. B.A. Sikirov¹³ and Dov Sikirov¹⁴ have investigations that support this fact. Since no such link has been found in earlier studies, the current study's finding that 78.4% of patients spent more than 10 minutes in the toilet suggests that they may have been straining to urinate.

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The present study was a short duration study of six months with a small sample size. Hence it is recommended that a study with a larger sample size be planned. There are many patients who do not seek a professional medical advice, rather they prefer consulting quacks and using indigenous methods. Another limitation of the present study is that it was conducted in a tertiary care set-up and the study population included subjects visiting the centre with chief complaints of anorectal diseases. Hence it is obvious that it may have missed the subjects with milder symptoms and this may include over-representation of the associated symptoms. Also, the observation in the present study that visiting the quacks and taking alternate treatments is a prevalent practice lends support to the above statement. However, the findings of the present study have useful implications as the identified risk factors in the present study are modifiable life style habits and these have implications in developing preventive program for subjects with anorectal disorders.

5. Conclusion

The study has shown that life-style habits may be instrumental in worsening the symptomatology in subjects with anorectal disorders. Such patients need to be educated and it should be stressed that the problems might revert back even after treatment if they continue with their faulty habits.

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TABLES AND CHARTS

Table 1: Age

Age Group	Frequency n(%)
0 - 10	2(1)
10 - 20	13(6.5)
20 - 30	59(29.5)
30 - 40	60(30)
40 - 50	32(16)
50 - 60	13(6.5)
60 - 70	14(7)
70 - 80	7(3.5)
Total	200(100)

Table 2: Modifiable Lifestyle factors

Variable(More than one response)	%
Smoking	54.7
Alcohol	78.3
High fibre Diet	32.2
Non Vegetarian Diet	11.2
Fast Food	86.1
Food Fads	24.9
Adequate Fluid Intake	41.2
> 10 min in Toilet	78.4
Indian Toilet	9.5
Sedentary Life style	48.3

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Chart 1: Symptoms associated with Anorectal diseases*(More than one response)

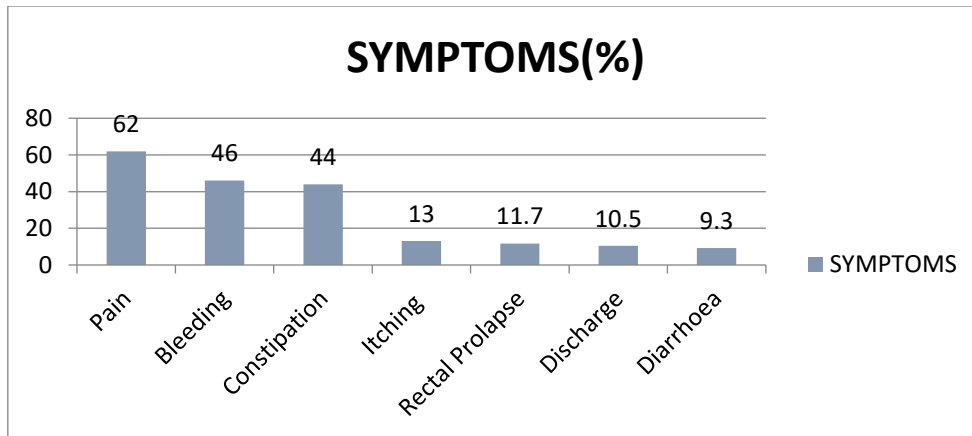
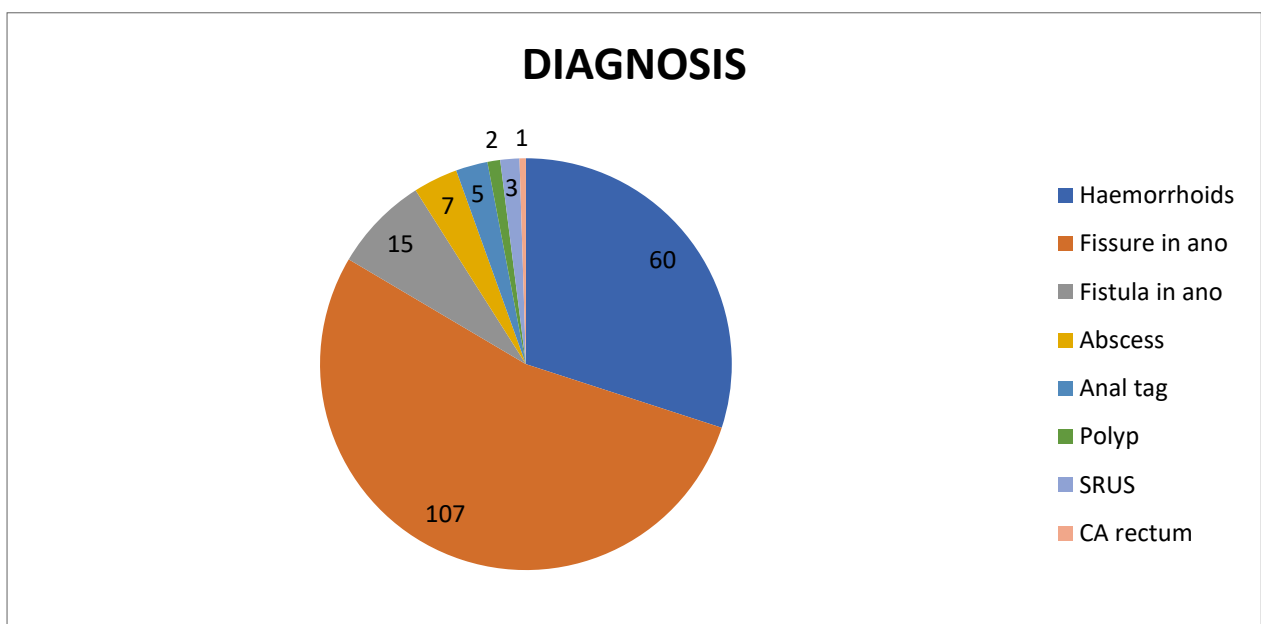


Table 3: Causes of pain

Causes of Pain	Frequency
FISSURE	93
ABSCCESS	16
HAEMORRHOIDS	15
FISTULA	8
SRUS	2
Total	134

Chart 2: Diagnosis



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Table no. 4: Treatment taken by subjects (n=131)

Treatment Taken	Frequency
BY QUACKS	51
BY NON SURGICAL SPECIALIST	14
BY SURGICAL SPECIALIST	25
ALLOPATHIC TREATMENT TAKEN	12
AYURVEDIC TREATMENT TAKEN	29
Total	131

Table no. 5: Complications

COMPLICATIONS	Frequency	%
	N=200	
SURGICAL SITE INFECTION	25	12.5
SPHINCTER DAMAGE	11	5.5
Total	36	18