

Original Research

Effect of Lifestyle Factors on Anorectal Disorders

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ABSTRACT:

Background: Anorectal disorders are commonly diagnosed in clinical practice. Risk factors commonly associated with Anorectal disorders include low fiber diet, chronic constipation & diarrhea, straining during defecation, pregnancy, sedentary lifestyle, obesity etc. **Methods:** This retrospective study was conducted in the department of surgery in Rana Hospital Punjab. 1000 adult patients with diagnosis of Anorectal disorders, admitted in surgery ward were included in this study. All the relevant details were obtained from medical record department with all demographic details. **Results:** Most of the patients (46%) belongs to the younger age (20-40 years). 69% were male patients and 31% were female patients. Patients with higher socioeconomic status were most commonly affected group (38 %) with Anorectal disorders. Commonest symptoms were Bleeding per rectum. In the present study, risk factors for Anorectal disorders were low fiber diet, mixed diet, poor hydration, chronic constipation or diarrhea, straining during the defecation, low physical activity and obesity. **Conclusion:** This demographic study of Anorectal disorders in this region can guide us to better understand the trends of this disease which is most commonly encountered in our society. This useful information may aid in the assessment and definitive care of these patients with Anorectal disorders.

Keywords: Anorectal disorders, Haemorrhoids; Demographic study; Risk factor, fissure.

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INTRODUCTION

Anorectal disorders are the most common benign anorectal disorder diagnosed in clinical practice and constitute about 50% of colorectal investigations [1,2]. Anorectal disorders are so much common in India that every perianal disease is termed as Anorectal disorders by most of the patients. Although Anorectal disorders are so common, only few patients seek medical treatment due to embarrassment. Anorectal disorders are more common in the adult population. Men are more frequently affected in comparison to women [3]. Risk factors commonly

associated with Anorectal disorders disease include low fiber diet, chronic constipation, chronic diarrhea, chronic straining during defecation, pregnancy, sedentary lifestyle, habit of postponing the bowel movements, obesity and spinal cord injuries etc. There is no published epidemiological study on Anorectal disorders which categorized the risk factors in Punjab region. The aim of this retrospective study is to compile the demographic data in patients with Anorectal disorders and assess the risk factors associated with this disease.

METHODS

Place of study: Department of Proctology, Rana Hospital, Punjab

Type of study: Retrospective study

Sampling Method: Consecutive

Sample collection: Data were collected from medical record department. 1000 adult patients with diagnosis of Anorectal disorders, fulfilling all the inclusion criteria were included in this study from last 4 years i.e. 2017-2020. All the relevant details were obtained from medical record department with all demographic details. Data were tabulated using detailed proforma. Following details of patients were recorded like age, sex, socioeconomic status, symptoms and risk factors. In all case records of admitted patients with Anorectal disorders, final diagnosis was made on the basis of detailed history, clinical & digital per rectal examination and proctoscopy. External examination with inspection of the anal and perianal region was done to see external sentinel piles, prolapsed internal piles and fissure or perianal ulceration. On digital per rectal examination were usually done to rule out any pathology like rectal carcinoma, rectal polyp, hypertrophied anal papilla, thrombosed internal piles etc. The anal sphincter tone was also assessed. Proctoscopy was usually done in each case to see the internal Anorectal disorders with their location and to rule out any pathology. Conservative management was preferred

in first, second and some third-degree Anorectal disorders. Patients with fourth degree or large third-degree Anorectal disorders were treated by surgeries. All the relevant collected data was compiled on master chart.

Inclusion criteria: Patients with Anorectal disorders of age group 20 to 80 years who were admitted in surgery ward were included in the study

Exclusion Criteria: Patients with piles secondary to anorectal tumor, pregnant female patients and patients less than 20 years of age were excluded from study

Statistical Methods: Results were shown in tables, comparing their numbers and percentages by scientific calculator and standard appropriate statistical formula.

Ethical Permission: Yes

RESULTS

The aim of this study was to analyze statistics in patients with Anorectal disorders to explain the demographic details and risk factors associated with Anorectal disorders. Records of patients with Anorectal disorders who were admitted in surgical wards were obtained from medical record department and after analysis the data following observations and results were obtained.

Table-1: Age wise distribution

Age group (years)	Total admission	%
20-40	500	50%
41-60	300	30%
61-80	200	20%
	1000	

Age – Highest number of patients belongs to the young age group of 20-40 years.

Table-2: Gender Wise Distribution

Gender	Total admission	%
Male	700	70%
Female	300	30%
	1000	

Sex – The male to female ratio was 2.2:1. Out of total admission of 430, 69% were male patients and 31% were female patients.

Table-3: Socioeconomic status wise distribution

Socioeconomic status	Total admission	%
Lower	330	33%
Middle	290	29%
Upper	380	38%
Total	1000	

Patients with higher socioeconomic status were most commonly affected group (38 %) with Anorectal disorders.

Table-4: Common Risk Factors for Anorectal disorders

Common Risk Factors		Number of patients %
Dietary habits	Low fiber diet	73.9%
	Mixed diet	67.2%
	Poor hydration	34%
Bowel habits	Chronic constipation or diarrhea	64%
	Straining during defecation	58.8%
Amount of physical activity	Low physical activity	34.9%
	Obesity	41.1%

Risk factors commonly associated with Anorectal disorders include low fiber diet, chronic constipation, chronic diarrhea, chronic straining during defecation, pregnancy, sedentary lifestyle, habit of postponing the bowel movements, obesity and spinal cord injuries etc.

DISCUSSION

Anorectal disorders are common anorectal disease that affects about most of the population by the age of 50 years. Age wise distribution analysis of the data reveals that most common age group affected with Anorectal disorders in our study was middle age group (41-60 years). It was almost similar to the study conducted by Ravindranath GG et al and Ali SA et al where most common age group was below 40 years [10, 11]. This was in contrary with studies of Khan et al and Johanson et al [3, 12]. Sex wise distribution of Anorectal disorders in our study reveals that the male to female ratio was 2.2:1. Out of total admission of 430, 69% were male patients and 31% were female patients. This may be due to a greater likelihood of men seeking treatment for their Anorectal disorders and embarrassment felt by women to consult for anorectal problems. A male predominance (66.7%) compared to the females (33.3%) suggested by Ravindranath GG et al [10]. A 55% male predominance was also seen in a study by Ali SA et al [11]. Socioeconomic status had a significant effect on patients with Anorectal disorders and our study showed that patients with higher socioeconomic status were most commonly affected group (37.2%) with Anorectal disorders. According to Lohsiriwat V in a study, whites and higher socioeconomic status individuals were affected more frequently than blacks and those of lower socioeconomic status [13,14]. This association of Anorectal disorders to higher socioeconomic status may be due to more prevalence of constipation due to dietary habits and lack of physical activity in this group. Also the patients with higher socioeconomic status usually have health seeking behavior. Constipation and prolonged straining are the main risk factor to cause Anorectal disorders in present study. Hard stool and increased intra-abdominal pressure could cause obstruction of venous return, resulting in engorgement of the Anorectal disorders plexus which leads to development of Anorectal disorders [15,16,17]. Defecation of hard fecal material increases shearing force on the anal cushions. However, recent evidence

questions the importance of constipation in the development of this common disorder [18]. Many investigators have failed to demonstrate any significant association between Anorectal disorders and constipation, whereas some reports suggested that diarrhea is a risk factor for the development of Anorectal disorders [12]. Low fiber intake, high intake of spicy and non-vegetarian mixed diet and poor hydration were found to be the risk factors of Anorectal disorders in the present study. Increase dietary intake of fiber, vegetarian non spicy diet and increased hydration can improve and prevent the Anorectal disorders by reducing the constipation which is a known risk factor for development of Anorectal disorders. According to Peery FA et al high grain fiber intake was associated with a reduced risk [19]. Sedentary life style, obesity and low physical activity was also one of the risk factors of Anorectal disorders, which was corroborated by Khan et al in his study [3]. But according to Peery FA et al, sedentary behavior was associated with a reduced risk, but not physical activity [19]. Neither being overweight nor obese was associated with the presence of Anorectal disorders.

CONCLUSION

Symptomatic Anorectal disorders are one of the common benign diseases usually found in patients with risk factors like chronic constipation, improper dietary habits, lack of physical activity and obesity. So the patients should be educated to change his dietary habits, to increase his daily physical activity and to prevent the constipation and not to ignore natural urge.

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