



A Prospective Clinical Study of Anorectal Disease at Tertiary Care Hospital in Western Rajasthan

Authors

Rajkumar Jain¹, Ajay Gandhi², Ashok Parmar³, Vinay Rai⁴, Sandeep Khadda⁵,
Naresh Meena⁶

^{1,4}Resident Doctor, ^{2,5,6}Assistant Professor, ³Professor

Department of General Surgery, S.P. Medical College and Associated Group of Hospitals, Bikaner

Corresponding Author

Ajay Gandhi

Assistant Professor, Department of General Surgery, S.P. Medical College and Associated Group of Hospitals, Bikaner Rajasthan India

Abstract

Background: Anorectal disorders include a diverse group of pathologic disorders that generate significant patient discomfort and disability.

Methods: Hospital prospective based study conducted in Department of General Surgery, S.P. Medical College And Associated Group of Hospitals, Bikaner. 100 patients reporting to the Surgery department within study duration and eligible as per inclusion criteria were included in the study.

Results: Hemorrhoids was the most common incidence of diagnosis (52%), 16% patients had anal fistula, 12% patients had anal fissure, 8% patients had rectal prolapsed, 7% patients had abscess, while 2% each patients had rectal polyp and other various conditions.

Conclusion: The most common anorectal disease affecting the population is hemorrhoids, of which internal hemorrhoids are seen more commonly. Constipation is found to be the most common predisposing factor for anorectal disorders in males and females

Keywords: Hemorrhoids, Fistula, Fissure.

Introduction

Anorectal disorders include a diverse group of pathologic disorders that generate significant patient discomfort and disability. Although these are frequently encountered in general medical practice, they often receive only casual attention and temporary relief.

Diseases of the rectum and anus are common phenomena. Their prevalence in the general population is probably much higher than that seen in clinical practice, since most patients with

symptoms referable to the anorectum do not seek medical attention.

As doctors of first contact, general (family) practitioners (GPs) frequently face difficult questions concerning the optimum management of anorectal symptoms. While the examination and diagnosis of certain anorectal disorders can be challenging, it is a matter of concern that the physical examination of the anorectum is often inadequately performed in general clinical practice.

The diagnosis and management of hemorrhoids, fissures, and pruritus ani, account on rough estimates, for more than 81% of the complaints centering around this part of the human anatomy¹.

Material and Methods

Study Design: Hospital prospective based study.

Study Duration: 12 months (August 2016 to July 2017).

Study Place: Department of Surgery, S.P. Medical College and P.B.M Associated Group of Hospital, Bikaner

Study Population: All patients with anorectal disease.

Sample Size: All patients reporting to the Surgery department within study duration and eligible as per inclusion criteria were included in the study.

Sampling Method: Convenience sampling

Inclusion Criteria

Patients attending the surgical OPD with anorectal disease.

Exclusion Criteria

- Pregnant Women
- Terminally ill cancer patients.
- Pediatric age group

Data Collection

Data were collected from under study population through a pretested and semi-structured schedule, which was designed in such a manner that more information regarding demographic profile, risk factors, morbidity and diagnosis could be collected. Reasons for the study were explained to the patients; prior to interview a written consent was taken. Diagnosis was made on the basis of clinical findings and anorectal examination, digital examination, proctoscopy and other investigations required as per the case. Anorectal examinations were performed under the supervision of qualified surgeons

Data Analysis

To collect required information from eligible patients a pre-structured pre-tested Proforma was used. For data analysis Microsoft excel and statistical software SPSS was used and data were analyzed with the help of frequencies, figures,

proportions, measures of central tendency, appropriate statistical test.

Results

Table 1 Frequency of Age Group (years)

Age Group (Years)	No. of Cases	Percentage
21-30	19	19.0
31-40	32	32.0
41-50	20	20.0
>50	29	29.0
Total	100	100

According to above table, most common age group in our study was 31-40 years (32%) followed by >50 years (29%), 41-50 years (20%) while least common age group was 21-30 years of age group where total 19% patients were found.

Table 2 Distribution of Cases according to gender

Gender	No. of Cases	Percentage
Female	24	24.0
Male	76	76.0
Total	100	100

In present study, male predominance over females where 76% were males and only 24% were females.

Table 3 Distribution of Cases according to dietary habits

Dietary Habit	No. of Cases	Percentage
Vegetarian	31	31.0
Non Vegetarian	69	69.0
Total	100	100

According to dietary habit, majority of patients were non vegetarian where only 31% patients were vegetarian.

Table 4 Distribution of Cases according to co-morbidities

Co-morbidities		No. of Cases	Percentage
Constipation	Absent	6	6.0
	Present	94	94.0
Diabetes Mellitus	Absent	94	94.0
	Present	6	6.0
Hypertension	Absent	97	97.0
	Present	3	3.0
Thyroid	Absent	100	100.0
	Present	0	-
TB	Absent	100	-
	Present	0	-
Crohn's Disease	Absent	100	100
	Present	0	-

IBD	Absent	100	100
	Present	0	-
Syphillis	Absent	100	100
	Present	0	-
HIV	Absent	100	-
	Present	0	-
Anemia	Absent	79	79.0
	Present	21	21.0

In present study, according to co-morbidities, constipation was present in 94% of cases while diabetes mellitus was present in only 6% patients, hypertension was present in 3% of patients, while anemia was present in 21% of patients. Thyroid, TB, Crohn's Disease, IBD, Syphillis and HIV was not present in any of the patients in our series.

Table 5 Frequency of incidence of diagnosis of various conditions

Various Conditions	No. of Cases	Percentage
Abscess	7	7.0
Anal Fissure	12	12.0
Anal Fistula	16	16.0
Hemorrhoids	52	52.0
Rectal Prolapse	9	9.0
Rectal Polyp	2	2.0
Others	2	2.0
Total	100	100

We observed that hemorrhoids was the most common incidence of diagnosis (52%), 16% patients had anal fistula, 12% patients had anal fissure, 8% patients had rectal prolapsed, 7% patients had abscess, while 2% each patients had rectal polyp and other various conditions.

Discussion

Present study was conducted in the department of General Surgery, S.P. Medical College and Associated group of Hospitals, Bikaner. This was a prospective hospital based study. One hundred cases were selected either from OPD or patients having anorectal disease.

In agreement with previous research, this study found a lack of knowledge of benign anorectal disorders among nonsurgical specialties. Moreover, we provide evidence that clinical symptoms have a greater influence on diagnostic accuracy for this pathology than years of clinical experience. Training in the diagnostic approach to

benign anorectal pathology among physicians is therefore warranted including clinical symptoms and clinical images because both are important for diagnostic accuracy in these disorders.

In present study, most common age group was 31-70 years (81%) and rest 19% cases had their age 21-30 years. Similar observations was also found by Yadav et al¹⁰⁰ where they found that 82% of patients were in between age group 30-70 years. Similar observations was also observed by Ankouane et al².

As per age group, out of 65 patients 42 belonged to the age group of 15-70 years, this justifies the fact that the anal fissures are more common in younger and middle aged persons. In young and middle aged persons muscles are toned and this tonicity resists the passage of hard stool and will result in the formation of fissure and may be due to this reason fissures are rare in aged persons due to muscular atony³.

A study done by Johanson and Sonnenberg revealed that symptoms increase with age and most commonly occur between the age group of 45-65 years⁶. Goligher revealed that anal fissure is usually encountered in young and middle age adults and it has no gender predilection.

Our study is male predominance (n=76) where male to female ratio was 3.1:1. These results are also consists with results of Yadav et al where in their study out of total 94 patients, 72 males and 22 females.

Similar observations were also observed by Khan et al 76.20% (317) were males and 23.80% (99) were females. It is mentioned that anal fissures develop with equal frequency in both sexes³ and according to our data frequency of anal fissure is more in males than females. The reason of this may be due to the higher attendance of male patients in NIUM hospital, or it may be due to that the females are too shy to talk about or to consult the physician for anorectal disorders.

In present study, constipation was present in 94% of cases while diabetes mellitus was present in only 6% patients, hypertension was present in 3% of patients, while anemia was present in 21% of

patients. Thyroid, TB, Crohn's Disease, IBD, Syphilis and HIV was not present in any of the patients in our series.

Hemorrhoids accounted for 52% of anus diseases in our study and were primarily internal. They are manifested by bleeding and/or anal prolapse for internal hemorrhoids and painful thrombosis and the sensation of anal swelling for external hemorrhoids. The mean age of patients was 41.9 years and male dominance was the rule with a male-female sex ratio of 2.9:1. This result is similar to the one reported previously in our country by Ndam et al⁴, in a retrospective study that included 720 patients explored by lower endoscopy, the anal lesions found were mainly hemorrhoids (39.4%). Several epidemiological studies in West⁵ and in Sub-Saharan Africa found similar results. A study from Côte d'Ivoire by Mahassadi et al⁶ aimed at determining the characteristics of anus diseases in 136 patients attending the proctology unit.

Conclusion

Anorectal diseases are seen most commonly in the age group 21-50 years and more than half of the patients of anorectal diseases present with per rectal bleed. The most common anorectal disease affecting the population is hemorrhoids, of which internal hemorrhoids are seen more commonly. Constipation is found to be the most common predisposing factor for anorectal disorders in males and females

References

1. Longo D.L. Fauci A.S. Harrison's principles of Internal Medicine. 18th edition. Mc Graw Hill ; 2012: 2969.
2. Ankouane F, Kowo M, Biwole Sida M, Tzeuton C, Ndjitoyp N. Anus diseases in proctology consultation in the Yaounde university teaching hospital (Cameroon): Male predominance, taboo and Neglected disease. *Austin J Gastroenterol* 2015; 2(5):1-5.
3. Sagap I, Remzi FH, Controversies in the treatment of common anal problems. *World Journal of Gastroenterology* 2006; 12:3146-3154.
4. Ndjitoyp Ndam EC, Njoya O, Mballa E, Nsangou MF, Njapom C, Moukouri Nyolo E et al. Apport de l'endoscopie dans la pathologie digestive basse en milieu camerounais étude analytique de 720 examens. *Med Afr Noire*.1991; 38:835-41.
5. Bouchard D, Pigot F. Douleurs proctologiques aiguës. *Hépatogastro & oncologie digestive*. 2011 ; 18:156-165.
6. Mahassadi KA, Soro KG, Kouakou B, Anzoua KI, Bangoura DA. Les affections colo-proctologiques et leurs déterminants au CHU de Yopougon (Côte d'Ivoire). *Rev int sc méd*. 2012; 14: 73-77.