



A STUDY ON SURGICAL PROFILE OF PATIENTS WITH ANO-RECTAL DISEASES

General Surgery

**Dr. Deepak
Sharma***

Assistant Prof., Dept of Surgery, Dr. BAMH, Pt. JNM Medical College, Raipur (C.G.)
*Corresponding Author

ABSTRACT

INTRODUCTION- Due to its increasing trends, now anorectal diseases (i.e. Hemorrhoids) had considered as a major public health problem. Anorectal diseases has a multifactorial etiology. Hence present study was carried out to explore the surgical profile of patients with anorectal diseases.

MATERIAL AND METHOD- The present hospital based cross sectional study was carried out for a period of two years at department of general surgery, Dr. Bhimrao Ambedkar memorial hospital, Pt. Jawaharlal Nehru Memorial Medical college, Raipur (C.G) India, among 105 patients. The data was entered in the Microsoft Excel Worksheet and analyzed.

RESULTS- It was found that maximum cases were below the age of 40 years i.e. 56.2% followed by 40-60 years of age group constituting 32.4% of cases. Males suffered more (67.6%) than females. The most common presenting complaint was bleeding in 96.2% of cases followed by pain in 92.4% of the cases. History of constipation was seen in 42.9% of the cases followed by prolapsed and itching in 20% and 17.1% of cases respectively. Though majority of the patients in the present study had history of bleeding per rectum, but very less of them i.e. about 29.5% were found to be anemic. Out of the total study subjects, majority i.e. 75.2% had anal fissure followed by external piles in 20% of the cases.

CONCLUSION- Early diagnosis & prompt treatment along with healthy life style adoption will reduce the need of surgery in these patients.

KEYWORDS

Hemorrhoids, Ano-rectal Disease, Constipation, Fistula, Bleeding.

INTRODUCTION

Due to its increasing trends, now anorectal diseases (i.e. Hemorrhoids) had considered as a major public health problem. Anorectal diseases has a multifactorial etiology. Anorectal diseases can be caused by chronic constipation, hard stools which leads to heavy straining etc.^{1,2} Hemorrhoids is defined as increase in size as well as distal displacement of apparently normal cushions which generally leads to symptoms. 4% of the world population is affected by the hemorrhoids. One of the study told that there is damage to the anal cushion which leads to hemorrhoids. Unlike usual belief it is not varicose veins. In the hemorrhoids, a vascular cushion is formed which is made up of muscle fibers, fibroelastic tissue and there is anastomoses of arteriovenous.

Hemorrhoids are mixed, external or internal types. Anal canal prolapse degree determines the classification of internal type of hemorrhoids. Acute and chronic are the types of external type of hemorrhoids. The patients generally present with pain, bleeding, itching or prolapse. Initially conservative approach of management is tried. But if the patient does not respond, then other aggressive methods are adopted.^{3,4}

Those patients who fail to respond to conservative treatment, surgery is done. Such type of patients is usually 5-10%. Also, if the patient presents with more than 3rd degree hemorrhoids and is symptomatic, then surgery is the only choice of treatment.

Patients usually go to the hospital on their own without much external motivation. They usually have symptoms like bleeding, pain and itching around the anus. Internal hemorrhoids are generally not painful. But they tend to prolapse or they may present with bleeding per rectum. Hence, if the patient present with pain in the anus, then some else pathology must be suspected and such patient deserves detailed investigations. About one fifth of the patients also have anal fissure along with hemorrhoids. It is the internal hemorrhoids only that lead to painless bleeding. Such bleeding is bright red in color because it is arterial. If the patient gives history that he is having rectal bleeding but not as described above, then thorough investigations should be done to suspect other causes of bleeding per rectum. Pain is the predominant feature of external hemorrhoids which are thrombosed.^{6,7,8}

Hence present study was carried out to explore the surgical profile of patients with anorectal diseases.

MATERIAL AND METHOD

The present hospital based cross sectional study was carried out for a period of two years at department of general surgery, Dr. Bhimrao Ambedkar memorial hospital, Pt. Jawaharlal Nehru Memorial Medical college, Raipur (C.G) India, among 105 patients. Institutional ethics committee permission was taken prior to study. Patients were

first checked for eligibility for inclusion in the present study and then only their informed consent was obtained. Objective of the study was to study surgical profile of patients with Anorectal diseases. The data was collected in the pre-designed, pre-tested, semi structured questionnaire for the present study. When the patient arrived in the outpatient department of general surgery out patient, he was thoroughly checked. At the same time, in depth history was taken in the present study. History included details like age, sex, occupation, religion, address etc. of the patients for the present study. On taking the history of all types of anorectal diseases specially hemorrhoids, it was found that bleeding and prolapsed were the chief complaints asked in the history of present illness in the present study. Hence detailed history was taken and recorded in the present study. Not only this, history was also taken regarding pain in the hemorrhoids in detail. Also, other historical aspects like relation of bleeding to defecation, bowel habits like regular or irregular, hard or soft stools, frequency, consistency, quantity passed etc, were noted down from the patients. Any history of discharge and its details like colour, smell, associated with before or after bowel habit etc, was noted down in the study questionnaire for the present study. Every patient was enquired about symptoms of rectal cancer. Family history of hemorrhoids like any family member suffering or suffered from hemorrhoids was recorded. In the personal history, patient's dietary, bowel and bladder habits were enquired into and recorded in the study questionnaire. Special emphasis was given on asking the history about presence of chronic bowel irregularities and chronic amoebiasis and recorded in the study questionnaire for the present study. General examination was carried out for each patient. Like pulse, blood pressure, pallor, icterus; edema was specially looked for and entered in the study questionnaire. Systemic examination was carried out for each patient as per the standard guidelines and recorded in the study questionnaire for the present study.

Rectal examination was carried out for each patient. Inspection of the anal and para-anal region was done first to see if there were any other findings. The anal sphincter tone was roughly estimated on palpation. Search was made for other pathologies also. Hemoglobin estimation was done using as per standard guidelines for all patients. The data was entered in the Microsoft Excel Worksheet and analyzed.

RESULTS

TABLE 1: DISTRIBUTION OF STUDY SUBJECTS AS PER DEMOGRAPHIC PARAMETERS.

Demographic parameters	Number	Percentage
Age (years)	< 40	59 56.2%
	40 - 60	34 32.4%
	> 60	12 11.4%

Sex	Male	71	67.6%
	Female	34	32.4%
Religion	Hindu	81	77.1%
	Muslim	24	22.9%
Community	Urban	81	77.1%
	Rural	24	22.9%
Occupation	Manual	61	58.1%
	Sedentary	44	41.9%
Family History	Yes	13	12.4%
	No	92	87.6%

It was found that maximum cases were below the age of 40 years i.e. 56.2% followed by 40-60 years of age group constituting 32.4% of cases. Males suffered more (67.6%) than females (32.4%). The Hindus had higher incidence (77.1%) than Muslims (22.9%). Hemorrhoids were seen commonly among urban dwellers (77.1%) than rural dwellers (22.9%). But occupation had no impact on incidence of hemorrhoids as it was similar among manual as well as sedentary occupations. Family history was present in only 12.4% of cases. [Table.1]

TABLE 2: DISTRIBUTION OF STUDY SUBJECTS AS PER PRESENTING COMPLAINTS.

Presenting Complaints	Number	Percentage
Bleeding	101	96.2%
Pain	97	92.4%
History of constipation	45	42.9%
Prolapse	21	20.0%
Itching	18	17.1%
Discharge	11	10.5%
History of worm infestation	13	12.4%
History of chronic amoebiasis	5	4.8%

The most common presenting complaint was bleeding in 96.2% of cases followed by pain in 92.4% of the cases. History of constipation was seen in 42.9% of the cases followed by prolapsed and itching in 20% and 17.1% of cases respectively. Discharge and history of worm infestation was seen in 10.5% and 12.4% of cases respectively. History of chronic amoebiasis was found in only five cases. [Table.2]

TABLE 3: DISTRIBUTION OF STUDY SUBJECTS AS PER DURATION OF BLEEDING.

Duration of bleeding	Number	Percentage
Less than 1 year	69	65.7%
1 - 5 years	19	18.1%
More than 5 years	17	16.2%

It was found that maximum patients reported to the hospital within one-year history of bleeding i.e. 65.7%. Around 18.1% of the patients reported with history of bleeding for 1-5 years. But even today we can find that there are people who still report even after five years of bleeding and this proportion was slightly more than 16.2% in the present study. [Table.3]

TABLE 4: DISTRIBUTION OF STUDY SUBJECTS AS PER HEMOGLOBIN LEVEL.

Hemoglobin in gm%	Number	Percentage
< 5	0	0.0%
5 - 8.9	8	7.6%
9 - 11.9	23	21.9%
> 12	74	70.5%

Though majority of the patients in the present study had history of bleeding per rectum, but very less of them i.e. about 29.5% were found to be anemic as per world health organization criteria. Majority i.e. 70.5% had normal hemoglobin levels. [Table.4]

TABLE 5: DISTRIBUTION OF STUDY SUBJECTS AS PER RECTAL EXAMINATION FINDINGS.

Rectal examination findings	Number	Percentage
External piles	21	20.0%
Fistula in ano	3	2.9%
Peri-anal abscess	2	1.9%
Anal fissure	79	75.2%
Total with ano-rectal disease	105	100.0%

Out of the total study subjects, majority i.e. 75.2% had anal fissure followed by external piles in 20% of the cases. Two cases were found to

have peri-anal abscess. Only three cases had fistula in ano. [Table.5]

DISCUSSION

It was found that maximum cases were below the age of 40 years i.e. 56.2% followed by 40-60 years of age group constituting 32.4% of cases. Males suffered more (67.6%) than females (32.4%). Hemorrhoids were seen commonly among urban dwellers (77.1%) than rural dwellers (22.9%). But occupation had no impact on incidence of hemorrhoids as it was similar among manual as well as sedentary occupations. Family history was present in only 12.4% of cases. The most common presenting complaint was bleeding in 96.2% of cases followed by pain in 92.4% of the cases. History of constipation was seen in 42.9% of the cases followed by prolapsed and itching in 20% and 17.1% of cases respectively. It was found that maximum patients reported to the hospital within one-year history of bleeding i.e. 65.7%. Around 18.1% of the patients reported with history of bleeding for 1-5 years. Though majority of the patients in the present study had history of bleeding per rectum, but very less of them i.e. about 29.5% were found to be anemic as per standard criteria. Majority had normal hemoglobin levels. Out of the total study subjects, majority i.e. 75.2% had anal fissure followed by external piles in 20% of the cases. Nearly similar findings were found in the study done by **Pande P.K et al.**⁸

Analysis of 55 studies as per their inclusion and exclusion criteria was carried-out by **Stock C et al** and found that majority of the studies were from United States and few from other countries. 5 Males were more affected than females which is similar to our study. Prevalence increased as the age increased as observed by **Stock C et al** whereas in our study higher prevalence was found in lower age group.⁹

Prevalence of constipation ranged from 2-28% as showed by **Talley NJ et al** whereas **Pande PK et al** showed slightly higher percentage of constipation whereas in other study 42.9% of the study subjects had history of constipation.¹⁰

A US based study on epidemiology of constipation and its impact on health was done by **Sonnenberg A et al.** Based on four different surveys, they presented this analysis. They noted that four million have frequent constipation in United States. This figure leads to a prevalence of two percent. These patients were usually given laxatives and cathartics.¹¹

Prevalence of 38.93% of haemorrhoids was found by **Riss S et al** in their study which is showing similar findings with our study.¹²

CONCLUSION-

Incidence of hemorrhoids was more common among the cases of the present study. People below 40 years of age were commonly affected. It was more in males. More prevalent among Hindus. Urban residents suffered more than rural residents. Bleeding was the most common presenting symptom. Anemia was not so common. Anal fissure was the commonest associated co-morbidity. Early diagnosis & prompt treatment along with healthy life style adoption will reduce the need of surgery in these patients.

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CONFLICT OF INTEREST: None declared

ETHICAL APPROVAL: The study was approved by the institutional ethics committee

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