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## Research Article

### PREVALENCE AND RISK FACTORS OF DIFFERENT ANO RECTAL DISORDERS AMONG INDOOR PATIENTS HAVING ANO RECTAL COMPLAINTS: AN OBSERVATIONAL RETROSPECTIVE STUDY

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#### ABSTRACT

Symptoms related to the anus and rectum are among the most common complaints to family physicians. The true incidence of Ano rectal disorders are impossible to ascertain since many people never seek medical advice. Ano rectal disorders ranges from benign and irritating (pruritis ani) to potentially life-threatening (Carcinoma). Total 221 IPD patients with ano rectal complaints were seen in Dep't. Of Jarahat (Surgery), National Institute of Unani Medicine from May 2016 to April 2017. Demographic data, reason for consultation and Ano rectal examination was done for each patient. Higher prevalence (36.20%) was observed in age range of 41-50 years, males were affected more (70.13%). On dietary basis (79.19%) were Non-vegetarian and high prevalence was noted in low SES and the persons who strains on defecation. Pain and bleeding during defecation in combination (27.60 %) are the most common chief complaint. Moreover, Anal Fissures (36.20%) are the most common aetiology for these complaints, followed by haemorrhoid, anal fistula etc. Most of the patients with Ano rectal diseases are scared, embarrassed, uncomfortable and nervous, therefore proper history with focus on the complaints will help to gain the confidence of the patient before physical examination and management is undertaken. Furthermore Complicated or undiagnosed pathologies, however, require further evaluation and expert opinion

**KEYWORDS:** Ano Rectal Diseases, Proctology, Family physician, Demographic data

#### INTRODUCTION

Rectum is the distal part of large gut which stores the faeces. Anus is the opening for passage of stool and is formed of sphincter muscles. Most of the patients with anorectal diseases are scared, embarrassed, uncomfortable and nervous, therefore proper history with focus on the complaints will help to gain the confidence of the patient before physical examination and management is undertaken.<sup>1</sup>

The prevalence of anal pathologies in general population is probably much higher than what is seen in clinical practice, since most patients with symptoms confined to the anorectal tend to shy away and do not seek medical attention. A primary care physician frequently faces difficult questions concerning the optimum management of ano-perianal symptoms. While the examination and diagnosis of certain Ano Rectal disorders is challenging, most of the common disorders of the ano-rectum can be easily recognized with a careful local examination and proctoscopy. On a rough estimate, more than 81% of the complaints pertaining on this part of human anatomy are occupied by disorders like haemorrhoids, fissures and pruritis ani.<sup>2</sup>

The anus is the outlet to the gastrointestinal tract, and the rectum is the lower 10 to 15 cm of the large intestine. The anal canal starts at the ano rectal junction and ends at the anal verge. The

average length of the anal canal is 4 cm. The midpoint of the anal canal is called the dentate line. This dentate or pectinate line divides the squamous epithelium from the mucosal or columnar epithelium. Four to eight anal glands drain into the crypts of Morgagni at the level of the dentate line. Most rectal abscesses and fistulae originate in these glands. The dentate line also delineates the area where sensory fibers end. Above the dentate line, the rectum is supplied by stretch nerve fibers, and not pain nerve fibers. This allows many surgical procedures to be performed without anaesthesia above the dentate line. Conversely, below the dentate line, there is extreme sensitivity, and the peri anal area is one of the most sensitive areas of the body. The evacuation of bowel contents depends on action by the muscles of both the involuntary internal sphincter and the voluntary external sphincter.<sup>3</sup>

#### Symptomatology of Ano Rectal problems

1. Pain
2. Bleeding per rectum
3. Discharge Per rectum
4. Anal pruritis
5. Mass around anus.
6. Mass during defecation
7. Constipation / Difficulty in passing stool
8. Faecal or flatus Incontinence.

#### Different Ano Rectal lesions

1. Haemorrhoids [Internal or external or thrombosed]
2. Anal fissures [Acute or chronic]
3. Anal fistula [Low or high]
4. Abscesses [Perianal, ischio-rectal, sub mucus]
5. Polyps
6. Rectal Prolapse
7. Anal skin tags or sentinel pile
8. Pilonidal sinus
9. Rectal ulcer
10. Strictures of anal canal or rectum
11. Inflammatory bowel disease (IBD)
12. Neoplasm's (benign or malignant).<sup>4,5,6,7</sup>

## METHODOLOGY

A retrospective record of demographic data, the reasons for consultation and Ano rectal examination from inpatients of Dep't. Of Jarahat, National Institute of Unani Medicine from May 2016 to April 2017.

**STUDY DESIGN:** An Observational Retrospective study.

**DURATION OF STUDY:** 1 year

**SAMPLE SIZE:** 221

## OBJECTIVE

To describe the demographic, clinical presentation, and pathological features of Ano rectal diseases among IPD patients of Jarahat department, National Institute of Unani medicine.

## RESULT AND ANALYSIS

The present study was conducted to describe the demographic, clinical presentation, and pathological features of Ano rectal diseases. The study consists of 221 cases having different Ano Rectal complaints. The data observed were as:

**Table 1: Distribution of participants according to Age**

Age In Years	No. of cases	Percentage (%)
20-30	11	4.98
31-40	73	33.03
41-50	80	36.20
51-60	36	16.29
61-70	21	9.50
<b>Total</b>	<b>221</b>	<b>100</b>

**Inference:** Majority of the patients lie in between 41-50 years (36.20%) followed by 31-40 years (33.03%), 51-60 years (16.29%), 61-70 years (9.50%) and 20-30 (4.98%).

**Table 2: Distribution of participants according to Sex**

Sex	No. of cases	Percentage (%)
Males	155	70.13
Female	66	29.87
<b>Total</b>	<b>221</b>	<b>100</b>

**Inference:** Majority of the patients were Males (70.13%) followed by Females (29.87%)

**Table 3: Distribution of participants according to SES**

Socio Economic Status	No. of cases	Percentage (%)
Upper	10	4.52
Middle	90	40.72
Lower	121	54.76
<b>Total</b>	<b>221</b>	<b>100</b>

**Inference:** Majority of the participants were from lower class (54.76%) followed by middle class (40.72%) and upper class (4.52%).

**Table 4: Distribution of participants according to dietary habits**

Diet	No. of cases	Percentage (%)
Purely Vegetarian	46	20.81
Mixed Diet	175	79.19
<b>Total</b>	<b>221</b>	<b>100</b>

**Inference:** As per Diet (20.81%) were vegetarian and (79.19%) recorded as Non-vegetarian/Mixed diet.

**Table 5: Distribution of participants according to straining on defecation**

Straining Time	No. of cases	Percentage (%)
No Straining	15	6.79
<5 Min	101	45.70
5-10 Min	96	43.44
>10 Min	9	4.07
<b>Total</b>	<b>221</b>	<b>100</b>

**Inference:** The above data clearly indicates that (45.70%) strains for <5min, followed by (43.44%) who strains for 5-10 min, (6.79%) no straining and (4.07%) strains for >10 min

**Table 6: Distribution of participants according to reason for consultation**

Complaints	No. of cases	Percentage (%)
Pain	50	22.62
Bleeding per rectum	21	9.50
Pain + Bleeding	61	27.60
Discharge Per rectum	7	3.18
Pain+Bleeding+Discharge	10	4.52
Anal Itching	5	2.27
Pain+Bleeding+Discharge+Itching	6	2.71
Mass around anus	14	6.33
Mass During defecation	45	20.37
Faecal or flatus Incontinence	2	0.90
<b>Total</b>	<b>221</b>	<b>100</b>

**Inference:** The above data clearly indicates that (27.60 %) were having complaint of pain and bleeding, followed by (22.62%) having complaint of pain only, (20.37%) having complaint of Mass During defecation.

**Table 7: Distribution of participants according to Ano rectal conditions**

Type of disease	No. of cases	Percentage
Fissure	80 [ 10 Anterior] [68 Posterior] [2 Lateral]	36.20
Haemorrhoids	75 [ 40 Internal] [20 Int. Ext] [10 External] [ 5 Thrombosed]	33.94
Fistula	15	6.78
Perianal Abscess	10	4.52
Pilonidal Sinus	7	3.17
Rectal Prolapse	5	2.26
Prostatitis	15	6.78
Rectal Polyp	3	1.36
Proctitis	4	1.81
Others	7	3.18
<b>Total</b>	<b>221</b>	<b>100</b>

**Inference:** The above data clearly indicates that (36.20%) were having Anal fissure, followed by (33.94%) having Haemorrhoids, (6.78%) each having prostatitis and Fistula in Ano.

## DISCUSSION

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 do not seek medical attention.<sup>3</sup>

The present study revealed that the Anorectal complaints are prevalent throughout life i.e. 20-70 years, but higher prevalence (36.20%) was observed in age range of 41-50 years. As per sex (70.13%) were males and (29.87%) females. As per dietary habits, (20.81%) were purely vegetarian and (79.19%) having Mixed dietary habit. As per straining on defecation, maximum patients (45.70%) usually strain for <5 min, followed by straining for 5-10 min in (43.44%), the persons who had no straining on defecation comprises of (4.07%) and only (6.79%) strain for > 10 min. As Per SES majority of the patients belongs to lower class (54.76%), followed by middle class (40.72%) and upper class (4.52%).

For patients consulting for anorectal symptoms, Pain and bleeding in combination are the major complaints (27.60%), followed by anal pain only (22.62%), Mass During defecation

(20.37%), Bleeding P/R (9.50%), mass around anus (6.33%), Pain + Bleeding + Discharge in combination (4.52%), discharge P/R only (3.18%), Pain + Bleeding + Discharge + Itching in combination (2.71%) and Faecal or flatus Incontinence in (0.90%)

This study also showed that anorectal diseases are dominated by Anal Fissure (36.20%). Then comes haemorrhoids (33.94%), followed by prostatitis and Fistula in Ano each (6.78%), then(4.52%) having perianal abscesses, Pilonidal Sinus (3.17%), rectal prolapse (2.26%), proctitis (1.81%) and Rectal Polyp (1.36%).

The posterior midline fissure was the most frequent (85%) far ahead of the anterior midline location (12.5%), and the lateral location (2.5%) in both men and women. Our results are almost same as written in literature.<sup>8</sup> Retro prospective Study by Hananel et al. having sample size of 876 also shows 73.5% of fissures occur in the posterior midline of the anal canal, 10% to 15% in anterior midline, and less than 1% sat in the lateral anal walls.<sup>9</sup>

Haemorrhoids (33.94%) were the second anal disease considered in this study. Internal haemorrhoids are manifested by bleeding P/R and mass during defecation, while as external haemorrhoids by swelling around anus. But when thrombosed they cause severe pain or discomfort. Another study by Dia et al

is in contradiction with our study which reveals 93% among 2061 patients with ano rectal complaints belongs to haemorrhoids.<sup>10</sup>

In our study, fistula in ano and perianal abscesses accounts for 6.78% and 4.52% respectively. Abscess and fistula are acute and chronic manifestations of the same diseases process.<sup>11</sup>

Anorectal abscesses are thought to originate from an infected anorectal gland. The infection can then track through the perianal tissues to form a perianal fistula, which is a connection between the infected anal crypt gland and the perineum. The conversion of abscess to fistula occurs in approximately 40% to 50% of cases.<sup>12</sup>

It is estimated that the incidence of ano rectal abscess is 100,000 cases per year in the United States. The mean age of presentation is 40 years, with a male predominance of 2:1.<sup>13, 14</sup> A retrospective study by Merzouk et al. covering 1523 cases of ano-perianal abscess, the prevalence of reported anal fistula was 73.27%.<sup>10</sup>

Our study also reveals that prostatitis accounts for 6.78%, Pilonidal Sinus diseases (3.17%), Rectal Prolapse (2.26%), Proctitis (1.81%) Rectal Polyp (1.36%) and others (3.18%) include benign /malignant anorectal tumours or undiagnosed on examination.

Anorectal disorders are a common group of diseases seen in the general practice. Advances have been made in understanding the pathogenesis of these diseases. Each of the disorders described can be distinguished by a thorough history and performing a complete examination. Anorectal disorders can significantly impair a person's quality of life.

## CONCLUSION

So this study concludes that anorectal complains are more prevalent in age group of 41-50 (36.20%) male sexes are commonly encountered (70.13%) and low socio economic status people, Non vegetarians and the persons who strains on defecation are also common victims. The chief complaint comprising of (27.60 %) patients having pain and bleeding in combination, followed by (22.62%) having complaint of pain only, (20.37%) having complaint of Mass during defecation.

Anal Fissures (36.20%) are the most common etiology for these complaints, followed by haemorrhoid anal fistula etc.

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