# Spectrum of benign anorectal diseases of patients admitted to Ibn - Sena general hospital in Mukalla city during period 2010-2014

Mohammed Alakbary , Abeer Bin Thalab

### Abstract:

**Background:** The benign anorectal diseases are common problems that affect scores of patients. These disorders not only provide the basis for the proctology practice for colorectal surgeons, but also the general surgeons and primary care physicians.

**Objective:** To describe the spectrum of benign anorectal diseases among patients attending to general Ibn-Sena hospital in Mukalla city during 2010 – 2014.

**Metods:** This is retrospective descriptive study, was carried out in Hadhramout governorate –Yemen between period of January 2010 and June 2014 .Total of 1128 patients, both male and female of all age groups, having benign anorectal disease were including in this study. Their age group classified to less than 25 years, between 25-49 years, and more than 50 year. The data was obtained from case files of patients admitted to surgical department of Ibn-Sena general hospital, for all benign anorectal disease cases registered for treatment during 2010-2014. Data collection include age, sex, surgical and histopathology diagnosis.

**Results:** The results showed that the most common type of the anorectal diseases was hemorrhoids which presented 771 of the whole cases (68.2 %) followed by perianal fistula which presented 231 of whole cases (20.4%), anal fissure which presented 117 cases (10.3 %), benign tumors which presented 15 cases (1.6%) and rectal prolapse which presented 6 cases (0.5 %), while the least common type was the pilonidal sinus which presented 3 cases (0.3%). They were common in females (59.4%), in 25-49 years age group (58%), and bleeding was the commonest symptom (35.19%).

**Conclusions:** Hemorrhoids was the commonest benign anorectal disease in our study. Benign anorectal diseases were frequent among females, with peak incidence detected in 25-49 years age group, and bleeding was the commonest presentation.

Keywords: Anorectal diseaase, hemorrhoids, Mukalla.

#### **Corresponding author :**

Dr. Mohammed Alakbary

college of medicine and health sciences- Hadramout University

- Mukalla- Hadramout Governorate- Yemen.

E-Mail: malakbary@yahoo.com Tel.: 967-770143263 طيف أمراض الشرج والمستقيم الحميدة عند المرضى الذين تم إدخالهم إلى مستشفى ابن سينا العام في مدينة المكلا خلال الفترة 2014–2010م

محمد العكبري، عبير بن ثعلب

الملخص:

الخلفية: الأمراض الشرجية الحميدة هي مشاكل شائعة تؤثر على عشرات المرضى. هذه الاضطرابات لا توفر فقط الأساس للممارسة العملية لجراحي القولون والمستقيم ، بل كذلك الجراحين العامين وأطباء الرعاية الصحية الأولية.

الهدف: وصف طيف أمراض الشرج والمستقيم الحميدة عند المرضى الذين ارتادوا مستشفى ابن سينا العام في مدينة المكلا خلال الفترة 2010 – 2014م.

الطريقة: هذه دراسة وصفية بأثر رجعي، أجريت في محافظة حضرموت – اليمن في الفترة من يناير 2010 إلى يونيو 2014م. وقد شملت الدراسة 1128 مريضًا من الذكور والإناث من جميع الفئات العمرية، يعانون من مرض شرجي –مستقيمي حميد. تم الحصول على البيانات من الملفات الخاصة بالمرضى الذين تم إدخالهم إلى قسم الجراحة في مستشفى ابن سينا العام، لجميع الحالات المرضية الحميدة المسجلة للعلاج خلال 2010 – 2014 م.

وتشمل مجموعة البيانات العمر والجنس والتشخيص الجراحي والتشخيص المعتمد على الفحص النسيجي وقد تم تصنيف الفئات العمرية إلى أقل من 25 عامًا، بين 49–25 سنة، وأكثر من 50 عامًا.

النتائج: أظهرت النتائج أن النوع الأكثر شيوعاً من الأمراض الشرجية هو البواسير الذي كان في 771 من مجمل الحالات (68.2 ٪) يليه الناسور حول الشرجي في 231 من الحالات (204 ٪) ، الشق الشرجي في 117 حالة (10.3 ٪) ، الأورام الحميدة في 15 حالة (1.6 ٪) ، وتدلي المستقيم في 6 حالات (0.5 ٪) ، في حين أن النوع الأقل شيوعاً هو البيب الناسوري الذي وجد في 3 حالات (0.3 ٪).

الخلاصة: البواسير هو المرض الشرجي الشائع في دراستنا. وكان المرض الشرج – مستقيمي الحميد منتشر بين المرضى في جميع الفئات العمرية، ولكن كان أكثر شيوعا في الفئة العمرية 49–25 سنة.

الكلمات المفتاحية: الأمراض الشرجي – مستقيمية ، البواسير ، المكلا٠

# Introduction:

Anorectal disorders are common, and their prevalence in the general population is probably much higher than that seen in clinical practice as most patients do not seek medical attention.1. These affect men and women of all ages. The spectrum of Anorectal disorders ranges from benign and irritating (pruritisani) to potentially life-threatening (anorectal cancer). The evaluation of patients is sometimes made difficult by nonspecificSymptoms.2

Evaluation of anorectal disorders comprises of a careful history and physical examination before the patient can be subjected to various investigations. Anorectal disorders are a group of medical disorders that occur at the junction of the anal canal and the rectum. These disorders are commonly encountered in general surgical practice. Patients with diseases of the anus and rectum are some of the most miserable people in the world.3

Benign anorectal disease include symptomatic hemorrhoids affected 10 million people in the United State annually, other benign anorectal disease affected of 23 million people.4 A recent prospective study of screening colonoscopy patients revealed the presence of hemorrhoids in 38.9%, out of 44.7% of those patients suffering from hemorrhoids symptoms. In 2004, the National Institutes of Health noted that the diagnosis of hemorrhoids was associated with 3.2 million ambulatory care visits, 306,000 hospitalizations, and 2 million prescriptions in the United States.5

# Material and Methods:

This descriptive study was carried out retrospectively from surgical records of patients with diagnosis of benign anorectal diseases admitted to surgical department at Ibn Sena'a General Hospital in Mukalla (Hadhramout) during period of 4 years from January 2010 and June 2014.

**Inclusion criteria:** Records of patients who suffering from benign anorectal diseases that include anorectal fissure, hemorrhoids, pilonidal sinus, fistu-

la, rectal prolapse and benign anorectal tumor.

**Exclusion criteria:** Records of patients with anorectal malignancy were excluded.

SPSS windows version 20 software was used for analysis of the data as description of quantitative variables include mean, frequency and percentage

# **Results**:

A total of 1128 patients with benign anorectal disease reported during period of 2010 -2014 were included in this study .Our results showed that the most common benign anorectal diseases was hemorrhoids which presented 453 of the whole cases (40.1%) followed by perianal fistula which presented 377 of whole cases (33.06), anal fissure which presented 267 cases (23.6%), benign tumor 15 case (1.32), pilonidal sinus represent 12 (1.06%) and finally rectal prolapse which presented 4 cases (0.35%) Table (1).

The results also revealed that the majority of benign an orectal diseases cases were in females which are 670 cases ( 59.4%), while in males are 458 cases ( 40.6% ). Table(1)

Perianal discharge is common presentation of patient has anorectal diseases represented in 437 cases (39.5%) while 397 cases (35.19%/) of them have perianal bleeding and 152 cases (13.4%) of them have perianal swelling, also perianal pain presented in 111 of cases (9.8%) and only 31 of cases (2.7%) hascombined symptoms. Table (2), Figure (1).

The prevalence of benign perianal disease common among (25-49 y) with 732 cases (58%) while the least among (>=50y) with 140 cases (17.5%). Table (3).

Colonoscopy done for patients above age of 50 years (140 case) showed that internal hemorrhoids was represent 34% of cases, external hemorrhoids (30.7%), combined (15%), anal fissure (9.2%) rectal polyps represented (10.7%) and the majority of them (90%) was adenomatous polyps confirmed by histopathological reports.

Sex	Surgicaldiagnosis												
	Hemorrhoid		perianal fistula		anal fissure		rectal prolapse		pilonidal sinus		benign tumors		Total
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	
Male	208	45.9	164	43.5	72	26.96	4	100	9	75	1	6.6	458
Female	245	54.1	213	56.49	195	73	0	0	3	25	14	93.35	670
Total	453	100	377	100	267	100	4	100	12	100	15	100	1128

Table 1: Distribution of anorectal disease by gender:

Table 2: Clinical presentation of benign anorectal disease:													
	Surgical diagnosis												
Symptoms	hemo	orrhoid	perianal fistula		anal fissure		rectal prolapse		pilonidal sinus		benign tumors		Total
	Ν	%	Ν	%	N	%	Ν	%	Ν	%	N	%	
bleeding	397	65.6	0	0	0	0	0	0	0	0	0	0	397
anal pain	28	4.6	0	0	83	61.1	0	0	0	0	0	0	111
anal discharge	28	4.6	354	100	55	39.9	0	0	0	0	0	0	437
perianal swelling	152	25	0	0	0	0	0	0	0	0	0	0	152
combined symptoms	0	0	0	0	0	0	4	100	12	100	15	100	31
Total	605	100	354	100	138	0	4	100	12	100	15	100	1128

#### Table 2: Clinical presentation of benign anorectal disease:

#### Table 3: Distribution of anorectal disease by age group:

	Surgical diagnosis												
Age group	hemorrhoid		Perianal fistula		Anal fissure		rectal prolapse		pilonidal sinus		benign tumors		Total
	N	%	N	%	Ν	%	Ν	%	N	%	Ν	%	
<25	128	24.3	85	19.5	36	26	4	100	0	0	0	0	253
25-49	328	62.5	302	69.5	87	63	0	0	12	100	0	0	732
>50	69	13.14	47	14	15	10.9	0	0	0	0	15	100	143
Total	525	100	434	1000	138	100	4	100	12	100	15	100	1128

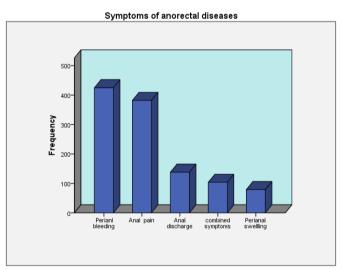


Fig. 1: symptoms of anorectal disease.

#### **Discussion**:

In this study of 1128 cases, the most common patterns of anorectal diseases: hemorrhoids, perianal fistula, and anal fissure (40.1%, 33.06 and 23.6% respectively). Controversial results were found in different literature such as in India (2006) hemorrhoids, perianal fistula, and anal fissure were 18%, 10%, and 54% respectively(6,7). In Germany study (2009) hemorrhoids, perianal fistula, and anal fissure were 74.3%, 0.7%, and 12.9% respectively(8).

According to the age, the presented study demonstrated that 58% of benign anorectal diseases were among patients at age of 25-49 years, while in Indian study (2008) were 35.29% (9).

The study also showed that the benign anorectal diseases were least common in older patients (17.5%), this finding was quite similar to the Indian study (2008) (15.4%) (9). Regarding gender, majority of the benign anorectal diseases (59.4%) were in females ,while among males (40.6%). On other hand, the Indian study (2008) demonstrated that the diseases were 71.71% in males and only 28.29% in females (9). The less percentage of females may be due to social and religious bindings and shy to attend male doctors.

The most common symptom of anorectal diseases in this study was bleeding (35.19%) then perianal swelling and anal pain. Likewise in Germany study (2009) appeared the most common symptom was bleeding (58.6%) then anal pain (33.7%)(8). Also in Indian study(2014) the most common symptom was bleeding (29%) (10).

The study showed that the common anorectal disease was piles and most common surgical technique was hemorrhoidectomy (100%), we found the same result in Brazilian study (2012) (11,12).

# **Conclusion:**

Hemorrhoids was the commonest benign anorectal disease in our study. Benign anorectal diseases were frequent among females, with peak incidence detected in 25-49 years age group, and bleeding was the commonest presentation..

## Reference:

- Billingham RP, Isler JT, Kimmins MH, et al. The diagnosis and management of common anorectal disorders Curr Probl Surg 2004; 41: 586-645.
- Lorenzo-Rivero S. Hemorrhoids: Diagnosis and current management". Am Surg; 2009; 8: 635– 642.
- Acheson A.G., Scholefield J.H. Management of haemorrhoids. BMJ; 2008 336 (7640):380–383.
- Sangwan YP, Schoetz DJ Jr, Murray JJ, Roberts PL, Coller JA: Perianal Crohn's disease.Results of local surgical treatment. Dis Colon Rectum 1996; 39:529–535.
- 5. Everhart JR, The burden of digestive diseases in the United States. Bethesda MD, National Institute of Diabetes and Digestive and Kidney Diseases, US Department of Health and Human, 2008.
- 6. Rattan S. The internal anal sphincter: Regulation of smooth muscle tone and relaxation. Neurogas-troenterol Motil 2005; 17 (1):50–59.
- Pravin J. A review of proctology disorder. European Review for Medical and Pharmacological Sciences. 2006; 10:327-335.
- 8. Kuehn H, Gebbensleben O, Hilger Y, et al. Rela-

tionship between anal symptoms and anal findings. International Journal of Medical Sciences. 2009; 6 (2):77-84.

- Sarkar.H, Hassan.M, and Laila.R. Pattern of Anorectal Disorders in Surgical Practice in Rajshahi.The Journal of Teachers Association. 2008; 21 (1): 69-72.
- Sreedevi B, Sasivannan A. Evaluation of Anal Diseas Complex in Surgical OPD in Tagore Medical College and Hospital.Journal of Evalution of Medical and Dental sciences.2014.Vol:3. Issue:19. Page:5100.
- Santos GA, Coutinho CP, Cruz GMG. et al. Surgical complication in 2840 cases of hemorrhoidectomy by Milligan-Morgan, Ferguson and combined techniques.JColoprectol. 2012; 32 (3): 271-290.
- 12. Diseases of the rectum and anus: a clinical approach to common disorders. Clin Cornerstone 2013; 34-48.