# THE PATTERN OF SURGICALLY TREATABLE ANORECTAL DISEASES IN UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL, RIVERS STATE, NIGERIA.

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### **ABSTRACT**

INTRODUCTION: Disorders of the anus and rectum occur commonly in surgical practice. Common anorectal disorders include haemorrhoids, carcinoma of the rectum, anal fissures, anorectal fistulae and abscesses. Less frequently encountered disorders include perineal injuries, anal cancers and rectal polyps. The purpose of this study is to determine the pattern of anorectal diseases which were surgically treated in University of Port Harcourt Teaching Hospital.

PATIENTS AND METHODS: This is a 4 year retrospective study of all adult patients with anorectal diseases who were admitted into the surgical wards of University of Port Harcourt Teaching Hospital. Relevant data were retrieved and analyzed.

RESULTS: One hundred and fifty cases were seen over the 4 year period. There were 92 (61.33%) males and 58 (38.67%) females making a male to female ratio of 1.6:1. The peak age incidence was 31-40 years. The commonest anorectal disorder was haemorrhoids. Other commonly encountered conditions in decreasing order were carcinoma of the rectum, anorectal fistulae, anal fissures and rectal prolapsed. Five patients died and they all had carcinoma of the rectum.

CONCLUSION: Haemorrhoids remain the commonest anorectal disorder in University of Port Harcourt Teaching Hospital. Carcinoma of the rectum which was not noted among the studied population in our centre 10 years ago now assumes the second position and this reflects an increasing incidence of the disease. Therefore, early diagnosis and treatment are imperative for increase in survival rate.

 $KEY\,WORDS: Pattern; An orectal\, diseases; University\, of\, Port\, Harcourt\, Teaching\, Hospital.$ 



### INTRODUCTION

isorders of the anus and rectum occur commonly in surgical practice<sup>1</sup>.

Haemorrhoids are the commonest anorectal disorders and cause of bleeding per rectum<sup>2</sup>. Other commonly encountered disorders are anal fissures, anorectal fistulae and abscesses<sup>2</sup>.

An increasing incidence of cancer of the rectum has been reported which is one of the commonest causes of cancer deaths<sup>3</sup>. Therefore, early diagnosis is necessary

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for the performance of curative surgery. Less frequently encountered disorders are perineal injuries (from penetrating or blunt trauma, iatrogenic injuries, foreign bodies, etc), anal carcinomas and rectal polyps<sup>3</sup>.

The purpose of this study is to determine the pattern of anorectal diseases which were surgically treated in University of Port Harcourt Teaching Hospital.

### PATIENTS AND METHODS

This was a 4 year retrospective study of all adult patients with anorectal diseases who were admitted into the surgical wards of University of Port Harcourt Teaching Hospital between January 2008 and March 2012. Relevant data which included age, sex,

diagnosis, treatment and outcome were retrieved and analyzed. Patients treated on outpatient basis and those without histological diagnosis where necessary were excluded from the study.

# **RESULTS**

One hundred and fifty cases were seen over the 4 year period. There were 92 (61.33%) males and 58 (38.67%) females (table 1) with a male to female ratio of 1.6:1. The commonest age groups were in the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> decades of life and the peak age was 31-40 years i.e 4<sup>th</sup> decade (table 2).

The commonest anorectal disorder was haemorrhoids (table 3). Other commonly treated conditions were carcinoma of the rectum, anorectal fistulas, anal fissures and rectal prolapse in decreasing order of frequency (table 3). Other less common conditions were anorectal abscesses, anal cancers and rectal polyps.

Milligan-Morgan haemorrhoidectomy was done for all the cases of haemorrhoids while fistulotomy and lateral internal anal sphincterotomy were done for anorectal fistulae and anal fissures respectively. The operative procedures done for carcinoma of the rectum were anterior resection for lesions above 10cm from the anal verge, abdominoperineal resection for all lesions below 10cm from the anal verge because of absence of stapling gun in our centre, and colostomy alone for advanced and obstructed lesions. Perineal rectosigmoidectomy was done for patients with irreducible and gangrenous rectal prolapse while Thiersh operation for old patients with co morbidities. The 6 patients with anorectal abscesses had cruciate incision and drainage.

Seven patients had post haemorrhoidectomy stenosis and they all responded to serial anal dilatation. There were 4 recurrences following fistulotomy and they all had repeat of the procedure.

Three patients with carcinoma of the rectum died before any surgical procedure was done while 2 of them died post operatively.

Table 1. The Gender distribution of patients

Disease	Number	Male	percentage	Female	percentage.
Haemorrhoid	65	40	61.54	25	38.46
Carcinoma of the rectum	22	14	63.64	8	36.36
Fistula-in-ano	19	16	84.21	3	15.79
Fissure-in-ano	17	10	58.82	7	41.18
Rectal prolapsed	15	8	53.33	7	46.67
Anorectal abcess	6	3	50.00	3	50.00
Anal cancers	5	3	60.00	2	40.00
Rectal polyp	1	0	0.00	1	100.00
Total	150	92	61.33	58	38.67

Table 2. Age distribution of patients.

Age group (years)	Number	<b>Percentage</b>
11-20	4	2.67
21-30	31	20.67
31-40	48	32.00
41-50	27	18.00
51-60	19	12.67
61-70	12	8.00
71-80	7	4.67
81-90	2	1.33
Total	150	100.01

Table 3. The Pattern of Anorectal diseases

Disease	Number	Percentage
Haemorrhoid	65	43.33
Carcinoma of the rectum	22	14.67
Fistula-in-ano	19	12.67
Fissure-in-ano	17	11.33
Rectal prolapsed	15	10.00
Anorectal abcess	6	4.00
Anal cancers	5	3.33
Rectal polyp	1	0.67
Total	150	100.00

Common presenting features indicating the presence of anorectal diseases include bleeding, pain, discharge, perianal swelling, changes in bowel habits, pruritus, prolapse, fever or incontinence<sup>4</sup>.

Adotey and Jebbin<sup>5</sup> reported 70 cases (including those of paediatric age group) over a 5 year period 10 years ago. The finding of 150 cases in this study from the same institution reflects an increasing incidence of the disease in our environment. This increase may also be partly attributable to the increase level of health awareness and enlightenment among the population. Despite this observed increase in incidence, the peak age incidence of 31-40 years noted in previous study<sup>5</sup> has remained the same.

In our study, haemorrhoids were the commonest disorders accounting for 43.3% of cases. This observation is similar to the findings of other workers<sup>6,7</sup>. Medical management which includes high fibre diet, increase fluid intake, bulk laxatives, topical agents like local anesthetics, steroids and antiseptics has led to long term relief of symptoms but without achieving cure<sup>8,9</sup>. The mainstay of treatment, therefore, is surgical<sup>10</sup>. Milligan-Morgan haemorrhoidectomy (open haemorrhoidectomy) was the most commonly performed procedure in our centre. This procedure is also regarded as the gold standard in the United Kingdom<sup>11</sup>. Non operative procedures like rubber band ligation, sclerotherapy, infrared photocoagulation, cryotherapy, etc have been described and are reserved for 1st and 2nd degree haemorrhoids<sup>10</sup> but are not available in our centre.

Carcinoma of the rectum which was not reported by Adotey and Jebbin<sup>5</sup> within their study period 10 years ago is found to be the second commonest anorectal disorder, affecting 14.67% of the patients. This observation confirms studies that reveal an increased rate of carcinoma of the rectum over the last 20 years<sup>3</sup>. Westernization of the diet in most African population may have contributed to this increase<sup>3</sup>.

Anorectal fistulae also featured relatively commonly among our patients. Diagnostic procedures like Magnetic Resonance Imaging (MRI) and fistulography have been advocated to define the anatomy of the fistula tract and detect any other pelvic pathology

present<sup>12</sup>. However, all our patients had surgical exploration without the performance of these investigations. This is because the MRI machine in our centre was not in good condition during the study period and the contrast medium for fistulography was not readily available. Other non operative procedures like fibrin sealant, dermal flap, endorectal flap and fistula plug have been described with favourable results<sup>13</sup> but none was performed on our patients.

Majority of acute anal fissures are self limiting or heal with conservative measures like sitz bath, high fibre diet, stool softners, etc. Chronic anal fissures are usually deep and will not heal because of spasm of the internal sphincters which results in impaired blood supply to the anal mucosa. Pharmacological agents which include topical diltiazam, nitroglycerine ointment, nifedipine ointment and botulinium toxin injection have been shown to lower anal sphincter pressure and heal fissures (i.e chemical sphincterotomy) 13 . This method is the first line of treatment of chronic fissures in many centres 15.

The gold standard for treatment is lateral internal anal sphincterotomy<sup>14,15</sup>. Potential side effects of this procedure include incontinence to flatus and faeces and this settles with time<sup>5</sup>. All our patients were treated by lateral internal anal sphincterotomy. Anal dilatation has fallen out of favour in recent years primarily due to the unacceptably high incidence of faecal and flatus incontinence<sup>16</sup>.

Innumerable methods of surgical management of complete rectal prolapse have been described by many workers and this reflects the inadequacy of these methods  $^{17}$ . Abdominal procedures are Ripstein repair, anterior resection, and rectopexy while perineal procedures are Delorme's operation, rectosigmoidectomy and Thiersh operation  $^{17}$ . The perineal approach results in less morbidity, pain and reduced hospital stay but higher recurrence rates  $^{18}$ .

In our study, the 11 patients who had Thiersh operation were elderly with significant co morbidities and considered unfit for major surgeries while rectosigmoidectomy was done for the remaining 4 patients with rectal prolapse because they had gangrenous and irreducible prolapse. Problems with Thiersh operation include high rate of infection,

implant extrusion, recurrence and failure to improve continence. However, the surgical approach is dictated by the co morbidities of the patient, surgeon's

## CONCLUSION

Haemorrhoids remain the commonest anorectal disorder in University of Port Harcourt Teaching Hospital.

Carcinoma of the rectum which was not noted among the studied population in our centre 10 years ago now assumes the second position and this reflects an increasing incidence of the disease. Therefore, early diagnosis and treatment are imperative for increase in survival rate.

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