

Prevalence of Benign Anorectal Diseases: A huge burden on society

Sughra Perveen¹, Abdul Malik Magsi², Mariam Malik³, Abdul Waheed⁴, Kehkashan Anwar⁵, Mazhar Iqbal⁶

ABSTRACT

Objective: To assess the frequency of Benign anorectal diseases and its impact on the society.

Study Design: Observational descriptive study.

Place and Duration: Colorectal Clinic, Surgical Unit 1 Jinnah Postgraduate Medical Center from 1st Jan, 2016 to 31st Dec, 2018.

Methodology: All patients with benign anorectal diseases presenting to colorectal clinic more than 12 years of age, both genders were included. The patients with biopsy proven anorectal malignancies were excluded. The frequency of all types of benign anorectal diseases with their and possible causes of adverse outcome were recorded.

Results: A total of 2825 patients with anorectal diseases were assessed during study period and among them 76.84% patients were diagnosed with benign anorectal diseases, 1.9% had malignancy and 21.2% patients presented with non-significant symptoms. Female dominance has been seen and out of 2171 patients with benign diseases, 42% had hemorrhoids which is showing the major burden among benign anorectal diseases.

Conclusion: The benign anorectal diseases are more prevalent in our population with detrimental social impact on society.

Keywords: Anorectal Diseases, Benign, Prevalence, Social impact, Morbidity, Disease Burden.

How to Cite This:

Perveen S, Magsi AM, Malik M, Waheed A, Anwar K, Iqbal M. Prevalence of Benign Anorectal Diseases: A huge burden on society.

Isra Med J. 2022; 14(1): 12-16. DOI: <https://doi.org/10.55282/imj.0a1288>

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INTRODUCTION

Benign Anorectal Diseases are not uncommon in a randomly selected population. The commonest benign anorectal diseases are comprising of anal fissure, hemorrhoids, fistula in-ano,

1. Professor of Surgery, Jinnah Post Graduate Medical Center, Jinnah Sindh Medical University, Karachi
2. Registrar Surgery, University Hospital Sussex NHS Foundation Brighton, UK
3. International Training Fellow Surgery Walsall Healthcare NHS Trust West Midlands, UK
4. Registrar Surgery, Jinnah Post Graduate Medical Center, Karachi
5. Resident Surgery, Jinnah Post Graduate Medical Center, Karachi
6. Associate Professor of Surgery, Jinnah Post Graduate Medical Center, Karachi

Correspondence:

Mariam Malik
International Training Fellow Surgery Department
Walsall Healthcare NHS Trust West Midlands, UK
Email: malikmariam_15@hotmail.com

Received for Publication: August 06, 2021

1st Revision of Manuscript: November 01, 2021

2nd Revision of Manuscript: December 05, 2021

3rd Revision of Manuscript: December 27, 2021

Accepted for Publication: March 17, 2022

pilonidal sinus, perianal abscesses, anal warts, rectal prolapse, anal stenosis, pruritis ani, rectovaginal fistula and anal incontinence. These disorders comprise of major load i.e., up to 20% of all outpatient Surgical referrals^{1,2}.

In conservative society or due to illiteracy, the anorectal disorders are considered as some sort of a divine curse and a matter of disgrace for a person in backward social set up. Due to this, the patient often put up with symptoms for long time, before seeking medical care. These conditions are extremely distressing and embarrassing for the patients and usually these patients put up with their symptoms for long time, before seeking any medical advice or care. Literature has reported that up to 80 % of the population with symptomatic benign anorectal pathologies have not consulted a specialist regarding their issues^{3,4}. Statistically, this volume is a huge burden over health services and society too. The commonest factors which make these diseases a phenomenal burden on society comprises of Illiteracy, social taboos, negligence, poverty, maltreatment, self-treatment, mismanaged obstetric events, anal sexual habits and unsupervised surgical interventions⁵. Moreover, the lack of stringent regulations permits quacks to impersonate as physicians and administer unscientific and potentially harmful treatment to gullible patients^{1,5}. It is extremely difficult to establish the precise prevalence of benign anorectal diseases due to above mentioned factors. Moreover, most of the anorectal conditions may simulate hemorrhoidal symptoms. To differentiate or diagnose these disorders from each other and a certain degree of competencies and clinical experience is required for example to differentiate fissure, pruritis, hemorrhoids, rectal prolapse etc⁶. Majority of the

patients are awareness or proper scientific knowledge about these pathologies and usually make self-diagnosis often a compendium of all the above diagnoses. At the other end more sadly, so are many physicians also lack competencies in diagnosing these disorders. Moreover, the high burden of benign anorectal diseases is not because of high prevalence of the disease but in addition the maltreatment and self-treatment are another factor which makes this number high^{6,7}. Literature has reported that traditional healers, hakeems or quacks which are in abundance in our set up, are mostly responsible for this high prevalence. According to a study, there are around 1.5 million quacks in India only¹. After their intervention, like mass hemorrhoid ligation by these quacks the commonest complications reported are bleeding, thrombosis, delayed massive bleeding, bacterial septicemia or toxemia, supra-levator abscess, perianal abscess, perianal fistula and painful priapism. Many patients have reported with the pelvic cellulitis with progression to shock and then death after their intervention⁴. Lack of awareness and perception among the public, and apathy on the part of enforcement agencies, has brought about circumstances where quacks are thriving in the country^{1,5}. In our setup, a throng of patients from different social set up and all walks of life, consult these hakeems, quacks or traditional healers for their anorectal disorders. After treatment, some shows contentment to their symptoms and believe that their problem is resolved up to some extent. But majority of these have to regret for life, because their original disease or symptoms gets worse or complicated and they have to pay the high price in rest of life for getting out of such complications^{1,8}. This study is planned with a view to observe and highlight the burgeoning worst outcomes of benign anorectal disease in our patients which if treated timely and rightly can be reduced. So, this study was conducted with an objective to assess the frequency of benign anorectal diseases and its impact on the society.

METHODOLOGY

This observational descriptive study was conducted in the tertiary care setup of Colorectal Clinic, Surgical Unit-1 Jinnah Postgraduate Medical Center Karachi from 1st Jan, 2016 to 31st December, 2018. Simple random sampling technique was employed to collect the data, after written permission by the Ethical Committee. The patients with benign anorectal diseases presenting to colorectal clinic with ages more than 12 years old, both genders were included. The patients who diagnosed anorectal carcinoma were excluded from study.

All patients were examined by surgeon having post fellow ship experience of at least three year. All necessary investigations were arranged for the diagnosis of these disorders. The frequency and possible causes of adverse outcomes in a large cohort of benign anorectal disease patients were observed carefully and recorded on performa for analysis. Performa which was filled prospectively highlighting patients complain of presentation, the diagnosis and the reason of delayed presentation with the worrisome outcome due to the delayed presentation.

Data Analysis: SPSS version 22 was used to analyze the data. Mean, median for age and frequency with 95% Confidence Interval for all diseases were calculated.

RESULTS

A total of 2825 patients were analyzed during study period and among them 2171 (76.84%) were with benign anorectal diseases. Among rest of patients, 54 (1.9%) had carcinoma and 600 (21.2%) patients presented with non-significant symptoms (Fig-1). Female dominance has been seen in our patients with a male to female ratio of 1:2.3.

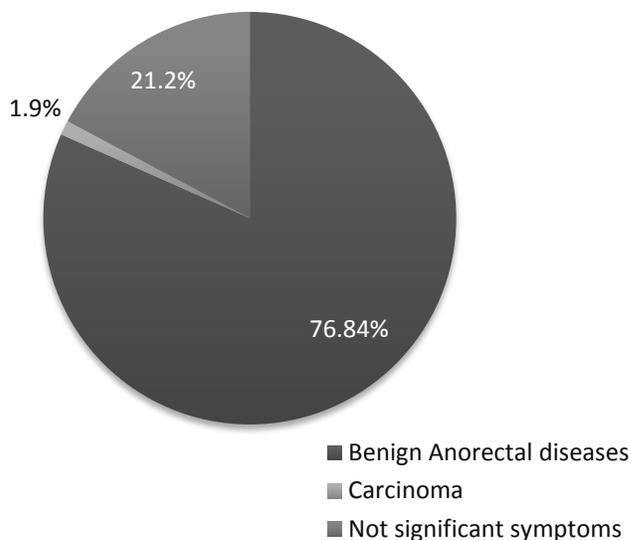


Fig-1: Frequency of Anao-rectal disorders (N=2825)

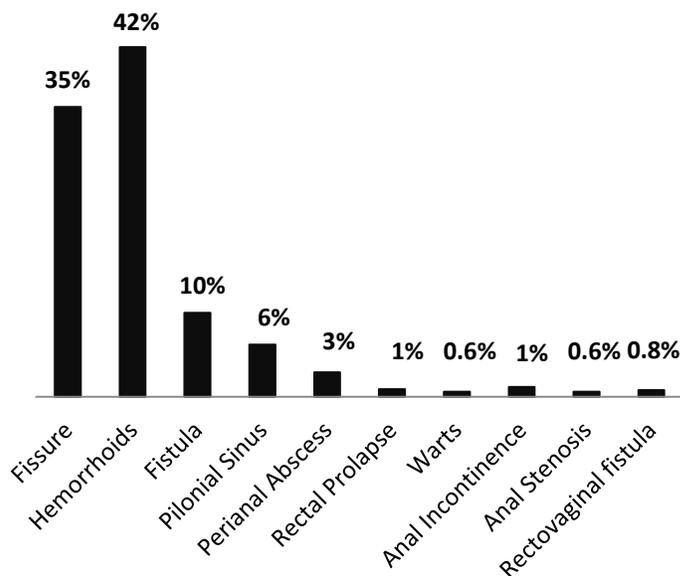


Fig-2: Prevalence of Benign anorectal diseases (n=2171)

Out of 2171, majority of patients 912 (42%) presented with hemorrhoids which is showing the highest burden among Benign anorectal disease. Fistula-in-ano, is the 2nd commonest ie 150 patients (10%) followed by pilonidal sinus (n=93, 6%), perianal abscesses (n=44, 3%), anal incontinence (n=18, 1%),

rectovaginal fistula (n=12, 0.8%), anal stenosis (n=9, 0.6%), anal warts (n=9, 0.6%), and rectal prolapse (n=4, 1%). (Fig – 2) Among patients with benign anorectal disorders, 615 patients (41%) were presented late for surgeons' consultation due to different reasons. While analyzing the data collected via Performa, we come across multiple hurdles making the benign anorectal disease presentation delayed and complicated. The main reason behind their delay were quacks 23%, social customs 19%, self-treatment 15%, Negligence 12%, Maltreatment 11%, unsupervised surgeries 9%, mismanaged labors 6% and anal sexual habits 5% (Fig-3).

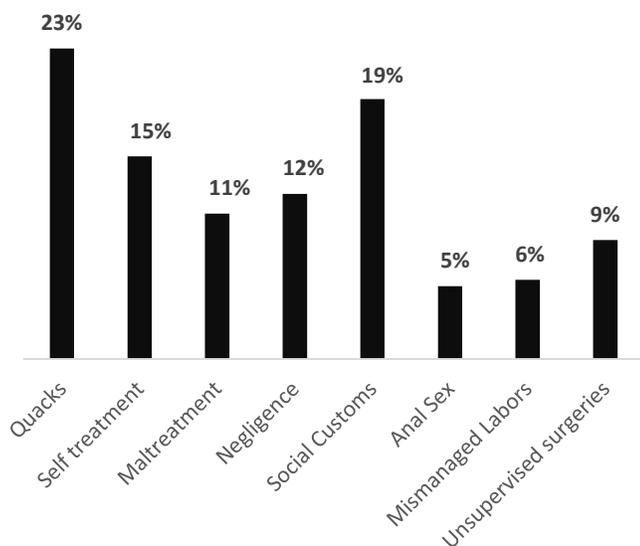


Fig -3: Causes of Worrisome Outcomes (n=2171)

DISCUSSION

The benign ano-rectal disorders comprise of a good number of common pathologies having a varied type of clinical presentations. These disorders comprise of a long list of diseases which make up a significant burden of patients reporting in routine clinics, 2-week wait clinics or in emergency room⁹. The literature shows that haemorrhoids, anal fissure, anal fistula, rectal prolapse are among the commonest pathologies reported^{9,10}. In our study, among all patients reporting to colo-rectal clinic, 76.84% comprises of benign anorectal diseases, whereas 1.9% also presented with non-specific symptoms. Among benign anorectal disorders major case load comprises of Haemorrhoids (42%), followed by anal fissure (35%) and anal fistula (10%). Sometime these benign disorders concomitantly presented with colorectal malignancy, or as a part of symptom of cancer. So, it important that the clinician should be meticulous and careful in ascribing patients' clinical presentation in the diagnosis of benign anorectal pathology only^{4,9}. Certain anorectal pathologies, such as incontinence, pruritis ani or rectal prolapse, pose a devastating impact on QOL of the patients. Therefore, the precise diagnosis and appropriate treatment strategies, a multidisciplinary approach, along with meeting patients' expectations where appropriate, usually improve the outcomes to the patient^{9,11}. Majority of our patients (23%) got initial treatment from

quacks or did self-treatment (15%) at home. About 19% of our patients got delayed treatment due to social customs. All patients have different justifications for above mentioned acts like illiteracy, lack of awareness, social set up, poverty and advertisement. The Prey et al⁷ has observed that the main reasons why patients with Benign anorectal diseases visit quacks are low price, easy availability, ravishing publicity tricks, claim of swift and definite cure. A good number of patients give the reason of their visits to quacks for their ailment are in the hope of conservative management (without operation) and economic reasons.

The maltreatment, unsupervised surgery or incomplete treatment is another reason of high morbidity reported in literature. Due to this, majority of them suffer from interminable morbidity for rest of their life^{3,12}. Kulkarni et al⁸ has observed that majority of these patients are too bashful to talk about their complications or to get consultation from surgeon well in time until they are in dejected circumstances and sometimes ending up in major morbidities like permanent colostomies. At the other end, the quacks or hakeem responsible hardly have any guilt about their malpractice, rather they tout it as one of the ways of their social services. In our study, during examination a good number of patients (11%) were found to be having maltreatment by quacks or doctors and in 9% patients it is suspected that the previous surgery was done by some junior doctor without any supervision of senior surgeon. Vaginal childbirth and mostly due to home delivery by traditional birth attendants is associated with high prevalence of pelvic floor disorders, among which pelvic organ prolapse and fecal incontinence is one of the major morbidities reported¹³. Similarly, the complication after anal sex (intercourse) carries the high prevalence of anal fissure or tears which leads to morbidity in which patients may seek advice from colorectal surgeon¹⁴. The fecal incontinence and flatus incontinence are the frequent complications of childbirth and are more common than previously believed¹⁵. In our patients, almost 1% patients had anal incontinence, 0.8% of patients are reported with recto-vaginal fistula and 0.6% with anal stenosis. The reason for this is as reported by the patients were mismanaged labour or maltreatment. The improper, incomplete or unsupervised surgical procedures are another cause of high morbidity in anorectal disorders. Usually, these procedures especially in public sector hospitals, are planned and carried out by the junior doctors and that at the end of operation list. Usually at this time no senior or skilled surgeon is there to supervise the procedure. This is another factor responsible in our set up for increasing the burden of these benign anorectal disorders. The Quality of life (QOL) is generally assessed or taken care of for individuals and in the modern or developed societies for their well-being. The education and awareness play a crucial role in improving the QOL of a patient with the particular disease^{11,12}. Literature shows that to define and assess the QOL of a patient is crucial with majority of anorectal disorders before planning a treatment¹¹. The Ferrer-Ma'riquez et al¹⁶, in their series of patients with anal fistula has reported that a moderate to high impact is exerted on the QOL of their participants which was

higher in female as compared to male. The Owen et al¹⁷ and McKenna et al¹⁸ has also shows a reduction in QOL as compared to the population having no anorectal disorder. However, only few studies indicate that in some patients the anorectal diseases are relatively well tolerated, which they corroborated with the fact that in initial six months of presentation of these symptoms, patients have worst QOL as compared to those having these symptoms for longer duration^{12,16}. Most likely, this could be explained as that adaptation mechanism plays a role in diseases which are chronic. This aspect can be considered in selected patients before starting any intensive management, as the time seems to play to lessen the disease severity in favor of these patient¹⁶. But in contrary, the Owen et al¹⁷ has reported that their patients with recurrent fistula presented with a poorer QOL in physical functions and in emotional role as well. The other factors affecting the QOL of the patients with the benign anorectal disorders are age, BMI, Sex, parity, previous surgical procedure, personal hygiene, has been Kumar et al¹² in their survey. To assess the quality of life, the GIQLI is a valuable instrument for patients with benign anorectal diseases. Although certain benign anorectal diseases do not seem to affect QOL profoundly but certain sub-groups of the patients, especially those having constipation, incontinence, pruritis ani, anal fissure, fistula in ano are extremely compromised^{10,18,19}. This GIQLI or other available tool should be used in selected patients to assess the QOL pre and post operatively. The other factors should also be considered like Ahmed et al²⁰ has observed that defecation postures have certain role on the outcome of chronic anal fissure and recommended that changing the defecation pattern from sitting to squatting enhances the complete emptying of rectum in a short duration with less use of expulsive forces. This leads to a reduction or improvement in symptoms and better or quicker healing of chronic anal fissure. Highlighting the factors related to benign anorectal diseases which results in the worrisome outcomes including anal stenosis, anal incontinence, sepsis, sexual life affects, social life issues, psychological concerns and financial burden are not enough simply until unless proper work to minimize these them has been done^{11,21}. Our paper presents for the 1st time present a QOL study in our social setup with ano-rectal disorders with the help of a questionnaire. The study could be more reliable and valid by using a scoring system like QoLAF-Q^{11,16} which was designed specifically for these types of patients. But for future studies, it is recommended to assess the effect of different treatment modalities on patients' QOL, which will be very helpful to the treating surgeon to consider when guaranteeing the failure or success of a planned surgical or conservative option. In future large volume studies are necessary in order to establish a greater correlation between anorectal disorders and QOL of the patients.

CONCLUSION

The benign anorectal diseases are more prevalent in our population with detrimental social impact on society.

Recommendations: It is recommended that a great deal of public education is requisite to create perception about anorectal disorders and their proper management with modern ephemeral, remedial and patient friendly surgical options. Quacks are non-regulated and thriving in the country. Work should be done on part of enforcement agencies to overcome increasing number of quacks. In operating list, giving these benign diseases should be given utmost importance while prioritizing then on elective operation list.

AUTHOR'S CONTRIBUTION

Perveen S: Conceived idea, Designed methodology.

Magsi MA: Data collection, Statistical analysis

Malik M: Manuscript writing, Data analysis.

Waheed A: Data collection

Anwar K: Data collection

Iqbal M: Final critical review and approval of manuscript

Disclaimer: None.

Conflict of Interest: None.

Source of Funding: None

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