Original article:

Frequency of Hemorrhoids in Madina and Osman Fiqi Hospitals of Somalia

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Abstract

Aim: Hemorrhoids are very common anorectal conditions, defined as the symptomatic enlargement and distal displacement of the normal anal cushions. The aim of this study was to determine the frequency of hemorrhoids in Madina and Osman Fiqi Hospitals of Mogadishu, Somalia. **Methods:** The data of all patients with the diagnosis of hemorrhoids who were admitted to Madina and Osman Fiqi Hospitals between January 2012 and December 2015 including demographics, diagnoses, regions of accommodation, and physical examination findings was recorded and analyzed. **Results:** Among the total study group of 100 patients 57 (57%) were men and 43 (43%) were women with a mean age of 47.6 (range: 35-65) years. According to the regions of accommodation of the patients, it was detected that 52 (52%) patients were from the center of Mogadishu and the remaining lived in other regions. With regard to the physical examination results, 58 (58%) patients were determined to have internal hemorrhoids, while the remaining 42 (42%) patients possessed external hemorrhoids. **Conclusions:** Hemorrhoidal disease has a peak incidence between the ages of 45 - 65 years for both genders and higher socioeconomic status is associated with increased prevalence. A detailed physical examination is essential for diagnosis. Despite its prevalence and low morbidity, hemorrhoidal disease has a high impact on quality of life, and can be managed with both surgical and nonsurgical treatments.

Keywords: Hemorrhoids; Etiology; Diagnosis; General Surgery; Somalia

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Introduction

Hemorrhoidal submucosal beds contain piles of vascular tissues, smooth muscles, and connective tissues that lie along the anal canal in three columns as left lateral, right anterior, and right posterior anal cushions which are involved in aiding evacuation of stool and fine-tuning of anal continence¹. Hemorrhoidal venous cushions are normal structures of the anorectum and are universally present unless a previous intervention has taken place.

The etiologies of hemorrhoidal disease are still unclear, although chronic constipation or diarrhea, lack of fiber in the diet, prolonged straining, derangement of the internal anal sphincter, and pregnancy are thought to be the primary causes, and

more than one of these factors may contribute to the pathophysiology²⁻⁴. Increased intraabdominal pressure, as seen in chronic constipation, causes engorgement of the vascular plexuses surrounding the anal canal resulting in the development of hemorrhoids⁵.

Hemorrhoidal disease represents pathological changes in the anal cushions including rupture of the supporting connective tissue within these cushions resulting in enlargement of the vascular plexus associated with the symptoms of bleeding, swelling and prolapse, seepage due to the disruption of the fine tuning of continence and consequent irritation of the perianal skin. More severe symptoms may include thrombosis leading to pain⁶.

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Engorgement above the dentate line leads the superior hemorrhoidal plexus to create internal hemorrhoids which are generally painless⁷. If they protrude into but do not prolapse out of the anal canal they are classified as Grade I, and if they prolapse on defecation but spontaneously reduce they are referred to as Grade II hemorrhoids. Grade III hemorrhoids require manual reduction, and if they cannot be reduced, they are termed as Grade IV hemorrhoids which remain prolapsed and may develop thrombosis and gangrene³.

On the contrary, the inferior hemorrhoidal plexus gives rise to external hemorrhoids that are painful due to their somatic innervation⁷. When inflamed, external hemorrhoids become red and tender, and if they become thrombosed, they can cause severe pain and be felt as a tender mass in the anal area⁸. Hemorrhoidal disease is a very common anorectal disorder that usually occurs among adults between 45-65 years of age and affects millions of people worldwide⁹. Hemorrhoids are rare in children but several reports state the occurrence of hemorrhoids in children as well as in elderly people¹⁰. An estimated 75% of all people will develop hemorrhoids in their lives¹¹. The incidence of hemorrhoidal disease is reported to have a wide range accounting for approximately 5-40% of the general population and resulting in a significant community and hospital practice burden^{6,12,13}. Therefore, hemorrhoids are considered as a major medical and socioeconomic problem.

Although hemorrhoids are a common condition diagnosed in clinical practice, many patients are too embarrassed to ever seek treatment. As a result, the true prevalence of pathologic hemorrhoids is not known¹⁴. According to various reports, the prevalence of hemorrhoidal disease ranges from 4.4% to 86 %^{15,16}. The aim of this study was to determine the frequency of hemorrhoids in Madina and Osman Fiqi Hospitals in Mogadishu, Somalia.

Methods

The study was conducted in two Mogadishu Hospitals which are Madina Hospital and Osman Fiqi Hospital.

All patients who were admitted to these hospitals between January 2012 and December 2015 having been treated with the diagnosis of hemorrhoids were enrolled.

Pediatric patients, and, according to the physical examination and anorectal examination findings, patients having received the diagnoses of any benign or malignant anorectal diseases other than hemorrhoids were excluded.

The data of the patients with the diagnosis of hemorrhoidal disease including their demographics, definite diagnoses, regions of accommodation, and physical examination findings was recorded and analyzed.

Results

One-hundred patients were admitted to, and were treated in Osman Fiqi and Madina Hospitals with the diagnosis of hemorrhoidal disease.

Among the total study group of 100 patients 57 (57%) were men and 43 (43%) were women with a mean age of 47.6 (range: 35-65) years (Figure 1).

Figure 1. The distribution of age groups among patients with hemorrhoids.

According to the regions of accommodation of the patients, that were stated at admission, it was detected that 52 (52%) patients were from the center of Mogadishu whereas 23 (23%) patients were from Lower shabele, 17 (17%) from Middle shabelle, 3 (3%) from Bay, 3 (3%) from Bakool and 2 (2%) patients were from Mudug (Figure 2).

Figure 2. The distribution of the patients with hemorrhoids according to their regions of accommodation.

According to the physical examination results, 58 (58%) patients were determined to have internal hemorrhoids, while the remaining 42 (42%) patients possessed external hemorrhoids (Figure 3).

Discussion

Hemorrhoidal disease is the fourth leading outpatient gastrointestinal diagnosis with an incidence of approximately 4.4% of the

Figure 3. The distribution of the patients according to their physical examination results.

population¹⁷. Both genders are reported to have a peak incidence between the ages of 45 - 65 years²¹. Our study group of 100 patients consisted of 57 (57%) men and 43 (43%) women with a mean age of 47.6 (range: 35-65) years (**Figure 1**).

Hemorrhoidal disease is reported to affect Caucasians more frequently than Africans, and higher socioeconomic status is associated with increased prevalence [18]. In the present study, according to the regions of accommodation of the patients, it was detected that 52 (52%) patients were from the center of Mogadishu whereas 23 (23%) patients were from Lower shabele, 17 (17%) from Middle shabelle, 3 (3%) from Bay, 3 (3%) from Bakool and 2 (2%) patients were from Mudug (**Figure 2**). The higher rate of admissions being from the center of Mogadishu may be attributed to the aforementioned socioeconomic status as being an etiological factor.

Contributing factors for increased incidence of symptomatic hemorrhoids include conditions that elevate intra-abdominal pressure such as pregnancy and straining, or those that weaken the supporting tissue. Rectal pain and bleeding should never be blindly attributed to hemorrhoids. A thorough history and physical examination is required to help identify any possible alternative diagnosis, and the possibility of a more insidious cause of rectal bleeding should always be considered²¹.

A detailed physical examination is essential for the diagnosis. At anorectal examination, external inspection will reveal any non-thrombosed or thrombosed external hemorrhoids. A thrombosed hemorrhoid often appears as a firm, slightly tender, pink-purple nodule which in more severe cases may also have ulcerations with bloody drainage¹⁹. Skin tags may be signs of either prior hemorrhoids, or anal fissures. Digital examination will exclude a distal rectal mass

and an anorectal abscess or fistula. An anoscopy should also be performed routinely to identify internal hemorrhoids or fissures, and to rule out distal rectal masses. Internal hemorrhoids can be reliably identified and described based on grade and degree of inflammation. Internal hemorrhoids are graded according to their severity of prolapse²¹. First-degree internal hemorrhoids bulge into, but do not prolapse out of the canal. Second-degree hemorrhoids prolapse outside of the canal during straining, but reduce spontaneously. Third-degree hemorrhoids prolapse out of the canal and require manual reduction. Fourth-degree hemorrhoids are irreducible manually⁷. In our study, according to the physical examination results, 58 (58%) patients were determined to have internal hemorrhoids, while the remaining 42 (42%) patients possessed external hemorrhoids (**Figure 3**).

Almost 40% of the individuals with hemorrhoids are asymptomatic²⁰. For symptomatic hemorrhoids, there is a variety of symptoms and many other anorectal pathologies such as anal fissure, fistula, pruritus, condyloma, and even anal cancer may often be labeled as "hemorrhoids"²¹. Although hemorrhoids are responsible for a large percentage of anorectal complaints, it is important to rule out more serious conditions, such as other causes of gastrointestinal bleeding, before safely attributing the symptoms to hemorrhoids. In a study of 198 physicians from different specialties, Grucela et al found the rate of correct identification for 7 common, benign anal pathologic conditions (including anal abscess, fissure, and fistula; prolapsed internal hemorrhoid; thrombosed external hemorrhoid; condyloma acuminata; and full-thickness rectal prolapse) to be the greatest for condylomata and rectal prolapse and the lowest for hemorrhoidal conditions revealing no correlation between diagnostic accuracy and years of physician experience²². The investigators found the overall diagnostic accuracy among the physicians to be 53.5%, with the accuracy for surgeons being 70.4% and that for the rest of the doctors being less than 50%²².

Despite its prevalence and low morbidity, hemorrhoidal disease has a high impact on quality of life, and can be managed with a multitude of surgical and nonsurgical treatments²¹. The mainstay of conservative management is lifestyle and dietary modifications including increasing oral fluid intake, increasing fiber intake, reducing fat consumptions, sitz baths, avoiding straining, and regular exercise^{6,23,24}. Medical

management is carried out via the use of topical treatments containing various local anesthetics, corticosteroids, or anti-inflammatory drugs²⁵. Options for non-surgical treatment includes rubber band ligation for Grade I-II-III hemorrhoids, in addition to sclerotherapy and infrared coagulation

for Grade I-II disease²⁶⁻²⁸. Surgical interventions such as hemorrhoidectomy, doppler-guided hemorrhoidal artery ligation and stapled hemorrhoidopexy are usually required in cases with continued symptoms despite conservative or minimally invasive measures^{2,21,29}.

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