

Profile and Management of Complicated (Strangulated) Prolapsed Internal Hemorrhoids at a Tertiary Care Hospital – A Prospective Study

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ABSTRACT

Introduction: Neglected cases of hemorrhoids presenting with complications like strangulation are not uncommon, as observed in our tertiary care hospital. Under the above background we conducted the present study to look into the profile and management of the patients with complicated (especially strangulated) prolapsed hemorrhoids attending to our tertiary care hospital.

Material and methods: This prospective hospital based study was conducted in unit-II of department of general surgery in Shri Maharaja Harisingh (SMHS) hospital Srinagar over a period of 5 years from January 2013 to December 2017. All patients with complicated prolapsed internal hemorrhoids (strangulation with infection, ulceration, gangrene, and/or necrosis) were enrolled in this study. Patients presenting with features suggestive of complicated prolapsed internal hemorrhoids were subjected to clinical history, local inspection and examination to confirm the diagnosis, and were managed appropriately.

Results: During the study period of 5 years, 31 patients of complicated (strangulated) prolapsed internal hemorrhoids were enrolled. The age of our patients ranged from forty-four to seventy-two years with mean age of 59.12±6.56 (SD=6.56) years. In our study 20 patients (64.5%) were from rural area and 11 patients (35.5%) were from urban background. Most common presentation in our study was strangulated prolapsed internal hemorrhoid with pain, ulceration and infection.

Conclusion: Patients with grade 3 and 4 internal hemorrhoids, patients having difficult access to health care facilities, and patients having poor compliance to conservative treatment, should be offered surgical intervention at the earliest before the complications arise. Complicated prolapsed internal hemorrhoids can be managed initially conservatively (by prone position, bed rest, saline compresses, hot baths, ice packs, soothing topical applications, laxatives, antibiotics, sitz bath with antiseptic solutions).

Keywords: Strangulated, Internal Hemorrhoid, Prolapsed, Conservative.

and/or distal displacement of normal anal cushions^{1,2}, which are prominences of anal mucosa formed by loose connective tissue, smooth muscle, arterial and venous vessels.³ Hemorrhoids are graded into four grades (I to IV). Grade I present with bleeding without prolapse, grade II present with bleed and prolapse during defecation followed by spontaneous reduction, grade III present with prolapse that needs digital replacement and grade IV hemorrhoids remain permanently outside. Grade III and grade IV hemorrhoids if not managed adequately by timely surgical intervention can be complicated by thrombosis, ulceration, infection, and necrosis. People with hemorrhoids, and those wrongly thought to have hemorrhoids, had an inclination to use self-medication as an alternative to seek proper medical attention.⁴ Practically, most patients with low grade hemorrhoids can be effectively treated with non-operative measures by either primary care physician, gastroenterologist or general surgeon in an outpatient setting. Surgery is indicated for high-grade hemorrhoids, or when non-operative approaches have failed, or complications have occurred.² Understanding of precise pathophysiology of hemorrhoids is incomplete. Presently, hemorrhoids is the pathologic term used for symptomatic and abnormal downward sagging of normal anal cushions.² A recent study of morphology and hemodynamics of arterial supply to the anal canal revealed a hyperperfusion state of hemorrhoidal plexus in patients with hemorrhoids⁵, suggesting vascular tone inside the hemorrhoid tissue is not well regulated.^{1,2} Furthermore, it was obvious that hemorrhoidal tissue incorporated some inflammatory cells⁶ and newly-formed micro vessels.⁷ Many risk factors including aging, obesity, abdominal obesity, pregnancy and depressive mood have been proposed to be the etiologies of hemorrhoid development.⁸ Meanwhile, few conditions related to raised intraabdominal pressure, such as prolonged straining and

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INTRODUCTION

Back ground: Neglected cases of hemorrhoids presenting with complications, such as strangulation with ulceration are not uncommon, as observed in our tertiary care hospital. Under this background we conducted the present study to look into the profile and management of the patients with complicated (especially strangulated) prolapsed hemorrhoids, presenting to our tertiary care hospital. Hemorrhoids is a very frequent anorectal problem defined as the symptomatic enlargement

constipation, are widely believed to cause hemorrhoids as a result of compromised venous drainage of hemorrhoid plexus.⁹ Several types of diet and lifestyle, including fiber poor diet, spicy foods and alcohol intake, were reported to be associated with the development of hemorrhoids and the aggravation of acute hemorrhoid symptoms.¹⁰

The present study was conducted to look into the profile and management of the patients with complicated (especially strangulated) prolapsed hemorrhoids attending to our tertiary care hospital.

MATERIAL AND METHODS

This prospective hospital based study was conducted in unit-II of the department of general surgery in Shri Maharaja Harisingh (SMHS) hospital Srinagar over a period of 5 years, from January 2013 to December 2017. All patients with complicated prolapsed internal hemorrhoids (strangulation with infection, ulceration, gangrene, and/or necrosis) were enrolled in this study. Patients presenting with features suggestive of complicated prolapsed internal hemorrhoids were subjected to clinical history, local inspection and examination to confirm the diagnosis, and were managed appropriately.

RESULTS

During the study period of 5 years, 31 patients of complicated prolapsed hemorrhoids (figure 1) were enrolled. The age of our patients ranged from forty-four to seventy-two years with mean age of 59.12 ± 6.56 (SD=6.56) years. Majority of patients in our study (26 i.e. 83%) were males with a minority of females (5 i.e. 16%). In our study, 20 patients (64.5%) were from rural area and 11 patients (35.5%) were from urban background. Most common presentation in our study was strangulated prolapsed hemorrhoid with pain, ulceration and infection. The most common cause of complicated (strangulated) prolapsed hemorrhoids was delay in surgical intervention or delay in seeking the surgical advice at the instance per se. Eight patients were advised to undergo surgery, but they were phobic to any surgical intervention. Eleven patients were dated for surgery in near future, and 6 patients did not seek surgical advice till the index presentation.



Figure-1: Complicated (strangulated) hemorrhoid.

Six patients of grade 3 category had opted for conservative management and progressed to prolapsed irreducible stage with complications.

Management

All patients of complicated prolapsed hemorrhoids in our study were managed initially conservatively (saline compresses, ice packs, soothing topical applications, laxatives, antibiotics, sitz bath with antiseptic solutions). The strangulated edematous hemorrhoidal masses decreased in size, became reducible, and the patients got symptomatic relief by virtue of the conservative management. Following this conservative phase of management, the patients were subjected to the definitive surgical treatment without the fear of complications resulting from operating on acute angry complicated hemorrhoids. No major complication occurred in our patients while adopting this management policy.

DISCUSSION

Obstruction to venous return, oedema and strangulation can occur due to acute prolapse, where the haemorrhoidal mass becomes trapped by the sphincter outside the anus. Patients complaint acute pain as presenting symptom. If left untreated, this can be highly incapacitating for several weeks.¹¹ Management is often conservative, including bed rest, analgesia, hot baths, ice packs, soothing topical applications and stool softeners. Eventually resolution does occur but there is a high incidence of continuing symptoms and a need for haemorrhoidectomy subsequently. All patients of complicated prolapsed hemorrhoids in our study were managed initially conservatively (saline compresses, ice packs, soothing topical applications, laxatives, antibiotics, sitz bath with antiseptic solutions). The strangulated edematous hemorrhoidal masses decreased in size, became reducible, and the patients got symptomatic relief by virtue of the conservative management. Following this conservative phase of management, the patients were subjected to the definitive surgical treatment without the fear of complications of operating on acute angry complicated hemorrhoids. No major complication occurred in our patients while adopting this management policy.

Review of 92 patients presenting to St Mark's Hospital over a 5-year period, represents One of the few studies of the longer-term consequences of conservative management of an acute episode.¹² Only 13.0% patients had no further trouble from their haemorrhoids, while 54.7% were advised to undergo a haemorrhoidectomy for continuing symptoms. The study indicates that thrombosis is 'merely an event in the natural history of the disease and does not affect subsequent symptoms'.

Older textbooks recommend a non-operative approach in the acute situation due to fear of surgical complications (including portal pyaemia, secondary haemorrhage, anal stenosis and incontinence). Many studies since have advocated otherwise¹³⁻¹⁸ and fears of systemic infection appear groundless.^{19,20} Technical difficulties can occur while identifying the anatomy and leaving adequate mucocutaneous bridges, when operating on strangulated haemorrhoids.

However, Hansen and Jorgensen found that the pedicles are usually unaffected and well defined.²¹ Histological confirmation to this was provided by Smith; of 15 specimens examined, most were free of thrombosis, and all were free of ulceration and inflammatory cells at the pedicle.²²

Following conservative phase of management, the patients in our study were subjected to the definitive surgical treatment without the fear of complications of operating on acute angry complicated hemorrhoids. In an attempt to circumvent the potential technical obstacles of radical haemorrhoidectomy in the acute event, Heald and Gudgeon described an abbreviated haemorrhoidectomy of the largest haemorrhoid with a four-finger anal stretch.²³ Of 21 patients, 5 required subsequent injection for bleeding but after 2 years no patients reported a major recurrence of symptoms.

CONCLUSION

Complicated (strangulated) hemorrhoids cause significant morbidity to the patients, and also cause significant burden on hospitals. Patients with grade 3 and 4 hemorrhoids, patients having difficult access to health care facilities, and patients having poor compliance to conservative treatment should be offered surgical intervention at the earliest before the complications arise. Complicated prolapsed internal hemorrhoids can be managed initially conservatively (by prone position, bed rest, saline compresses, hot baths, ice packs, soothing topical applications, laxatives, antibiotics, sitz bath with antiseptic solutions). The strangulated edematous hemorrhoidal masses decrease in size, become reducible, and the patients get symptomatic relief by virtue of the conservative management. Following this conservative phase of management, the patients can be subjected to the definitive surgical treatment without the fear of complications resulting from operating on acute angry complicated hemorrhoids, although recently some recommend immediate surgery without the conservative phase. All patients of complicated (strangulated) prolapsed hemorrhoids in our study were managed initially conservatively (by saline compresses, ice packs, laxatives, antibiotics, sitz bath with antiseptic solutions) followed by definitive surgical treatment, without any major complications.

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