World Journal of Advanced Research and Reviews
eISSN: 2581-9615 CODEN (USA): WJARAI
Cross Ref DOI: 10.30574/wjarr
Journal homepage: https://wjarr.com/

(CASE REPORT)

Check for updates

Case Report on Strangulated Grade IV Hemorrhoidal Disease in a 28-Year-Old Male

Shadrack Barffour Awuah [1,*], Kirean Kelechi Eze [2] and Emmanuel Cherechi Egwuatu [2]

[1] *Emergency and trauma unit, St. Martins Catholic Hospital, Agroyesum, Amansie South District, Ashanti Region, Ghana.*
[2] *Department of Emergency and Trauma, Our Lady of Fatima Catholic Hospital, Bwari, Abuja, Nigeria.*

World Journal of Advanced Research and Reviews, 2022, 16(01), 1270-1272

Publication history: Received on 13 September 2022; revised on 23 October 2022; accepted on 28 October 2022

Article DOI: https://doi.org/10.30574/wjarr.2022.16.1.1076

Abstract

Introduction: Strangulated hemorrhoidal disease represents one of the most painful and urgent anorectal emergencies. It occurs when prolapsed internal hemorrhoids become incarcerated and their venous return is compromised, leading to edema, ischemia, and potential necrosis. Prompt diagnosis and surgical management are critical to preventing systemic complications such as sepsis.

Case Presentation: We report a case of a 28-year-old male who presented to the emergency department with a painful irreducible hemorrhoidal prolapse of two days' duration. The patient had a two-year history of recurrent prolapse during defecation, which usually reduced spontaneously. However, the most recent episode failed to retract, and subsequent self-treatment with herbal preparations resulted in worsening pain and inflammation. Examination revealed a tender, edematous, prolapsed hemorrhoidal mass with minimal abrasions. The patient was febrile and tachycardic but normotensive and maintaining normal oxygen saturation.

Management: The patient was promptly stabilized, started on intravenous fluids, broad-spectrum antibiotics, and analgesics. The prolapsed hemorrhoidal tissue was covered with moist sterile gauze while preparations were made for definitive surgical intervention. Emergency hemorrhoidectomy was successfully performed under appropriate anesthesia. Postoperatively, the patient was managed with analgesics, sitz baths, stool softeners, and antibiotics. Recovery was uneventful, and he was discharged in stable condition with advice on dietary and lifestyle modifications.

Conclusion: Strangulated hemorrhoids are surgical emergencies requiring prompt recognition and intervention. Delay in seeking medical care or the use of unverified local remedies can exacerbate the condition, leading to necrosis and systemic infection. Early surgical management remains the definitive treatment with favorable outcomes.

Keywords: Strangulated hemorrhoid; Grade IV hemorrhoidal disease; Hemorrhoidectomy; Anorectal emergency

1. Introduction

Hemorrhoidal disease remains one of the most common anorectal disorders worldwide, affecting both sexes and all age groups. It results from the pathological enlargement and distal displacement of the normal anal cushions composed of vascular tissue, smooth muscle, and connective tissue. Strangulated Grade IV hemorrhoids represent the most advanced stage, where the prolapsed tissue becomes irreducible with compromised blood flow, often necessitating emergency surgery.

In resource-limited settings, delayed presentation and self-medication using herbal preparations are common, leading to complications such as ulceration, thrombosis, and sepsis. This case illustrates the importance of early recognition and timely surgical intervention in managing strangulated hemorrhoidal disease.

* Corresponding author: Shadrack Barffour Awuah

2. Case presentation

2.1. Patient Information

A 28-year-old male was brought to the Emergency Department by his wife with a two-day history of a painful, irreducible rectal prolapse. He reported a two-year history of recurrent prolapsed hemorrhoids following defecation, which typically reduced spontaneously. However, in this episode, the prolapse failed to retract. He applied various herbal preparations without relief. The pain progressively worsened, prompting hospital presentation.

2.2. Clinical Findings

On examination, the patient was alert but in severe distress due to pain. He was febrile (38.6°C), tachycardic (HR 110 bpm), normotensive (BP 118/76 mmHg), with normal respiratory effort and oxygen saturation. Perineal examination revealed an irreducible, congested, and edematous hemorrhoidal mass protruding through the anal verge, tender to palpation, and with small abrasions beneath the prolapse. There was no evidence of active bleeding or gangrene at presentation.

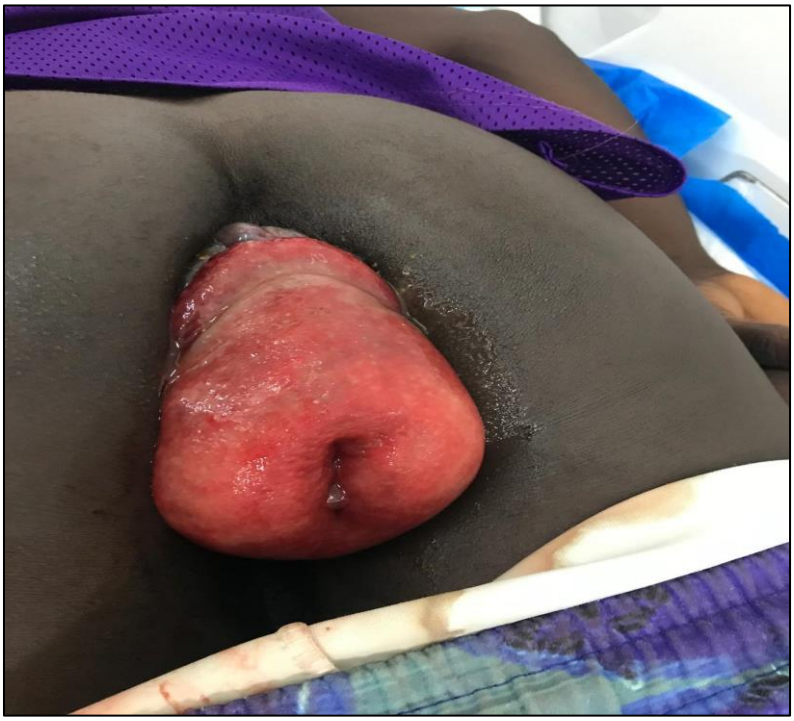

Figure 1 The hemorrhoidal desease of the 28-year-old male

2.3. Diagnostic Assessment

The diagnosis of strangulated Grade IV internal hemorrhoidal disease was made based on clinical findings. Laboratory work-up included a complete blood count showing mild leukocytosis. Electrolyte levels were within normal limits.

3. Management

Initial management involved adequate analgesia and broad-spectrum intravenous antibiotics to prevent secondary infection. The prolapsed tissue was gently covered with sterile moist gauze to prevent desiccation. The patient was prepared for emergency surgery. Under appropriate anesthesia, an excisional hemorrhoidectomy was performed with careful hemostasis. Postoperative care included analgesics, stool softeners, sitz baths, and a high-fiber diet.

The patient's recovery was satisfactory. He was afebrile by postoperative day two and discharged on day four with counseling on dietary modification and prevention of constipation. Follow-up review showed complete wound healing with no recurrence.

4. Discussion

Strangulated hemorrhoidal disease occurs when prolapsed internal hemorrhoids become incarcerated and edematous, resulting in venous congestion and ischemia. The use of local herbal or caustic preparations can worsen tissue injury and increase infection risk.

Management requires prompt resuscitation, analgesia, infection control, and surgical intervention. Conservative therapy is inadequate in strangulated Grade IV cases due to irreversible vascular compromise. Hemorrhoidectomy remains the gold standard for definitive management, ensuring rapid symptom relief and prevention of complications. This case highlights the need for public awareness on the dangers of self-treatment and the benefits of early hospital presentation for anorectal conditions.

5. Conclusion

Strangulated Grade IV hemorrhoids are surgical emergencies requiring timely recognition and management. Delay in seeking appropriate medical care can result in tissue necrosis, sepsis, and increased morbidity. Prompt surgical intervention, appropriate postoperative care, and patient education on dietary and lifestyle measures are key to successful outcomes.

Compliance with ethical standards

Disclosure of conflict of interest

Authors have no conflict of interest

Statement of informed consent

In accordance with international ethical standards, written informed consent was obtained from the patient for publication and securely retained by the authors.

Authors' contributions

Author 1 led the management team and coordinated the case, author 2 and 3 led the literature review and manuscript writing. All authors jointly read and approved the final manuscript.

References

[1] Riss, S., Weiser, F.A., Schwameis, K., Riss, T., Mittlböck, M., Stift, A. (2012). *The prevalence of hemorrhoids in adults.* International Journal of Colorectal Disease, 27(2), 215–220. doi:10.1007/s00384-011-1316-3

[2] Alonso-Coello, P., Zhou, Q., Martinez-Zapata, M.J., Mills, E., Heels-Ansdell, D., Johanson, J.F., Guyatt, G. (2006). *Meta-analysis of flavonoids for the treatment of hemorrhoids.* British Journal of Surgery, 93(8), 909–920. doi:10.1002/bjs.5362

[3] Johanson, J.F., Sonnenberg, A. (1990). *The prevalence of hemorrhoids and chronic constipation: An epidemiologic study.* Gastroenterology, 98(2), 380–386. doi:10.1016/0016-5085(90)90828-o

[4] Shanmugam, V., Thaha, M.A., Rabindranath, K.S., Campbell, K.L., Steele, R.J., Loudon, M.A. (2005). *Systematic review of randomized trials comparing rubber band ligation with excisional hemorrhoidectomy.* British Journal of Surgery, 92(12), 1481–1487. doi:10.1002/bjs.5182