Horseshoe Abscess as a Rare Complication After Transanal Hemorrhoid Dearterialization With Mucopexy

Marshall University Joan C. Edwards School of Medicine, General Surgery
Yuki Nakao MD, Heather Reeves DO, James Martin MD

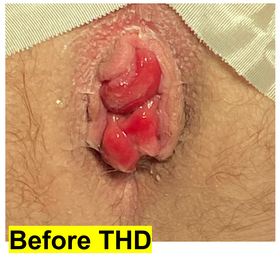


INTRODUCTION

- Hemorrhoidal disease affects approximately 4.4% of the US population.[1)]
- Transanal hemorrhoidal Dearterialization (THD) is a minimally invasive procedure increasingly favored for treating symptomatic hemorrhoids.
- Horseshoe abscess is a rare but recognized complication of anorectal surgery, with post-THD occurrences not extensively documented in medical literature.

CASE PRESENTATION

- 72-year-old male.
- He underwent THD for stage IV rectal prolapse with internal hemorrhoids.


Before THD

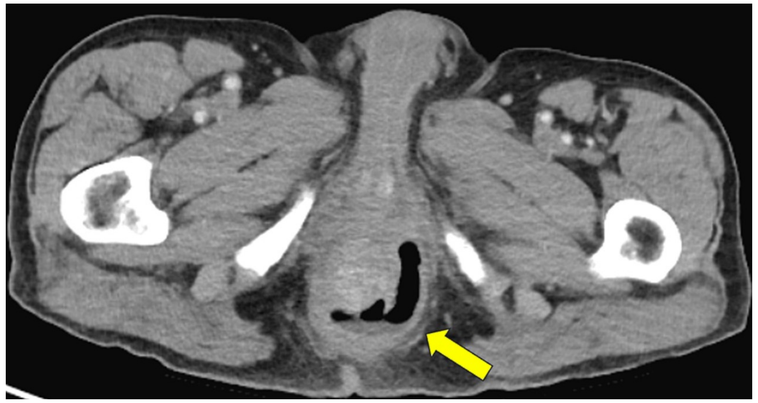

After THD



THD system

- He presented to the hospital on POD#6 with severe rectal pain.
- WBC 18.6 x 10^9/L, Hgb 14.6 g/dL, Na 127 mEq/L.
- A Computed Tomography (CT) scan revealed a large complex horseshoe abscess (Figure 1).

Figure1: A large complex horseshoe perirectal abscess is seen.



PROCEDURE

- A rectal examination was performed under anesthesia.
- It revealed purulent drainage from the anus with no external openings detected.
- Swelling and a bulge were observed on the left side of the midline.
- Two incisions were made at the 1 and 5 o'clock positions to evacuate the fluid collection.
- The seropurulent drainage was subsequently evacuated.
- Two half-inch Penrose drains were inserted along two fistulous tracts, functioning as setons.

DISCUSSION

- THD was specifically designed to minimize postoperative complications like pain and has been refined over time to widen its applicability and enhance patient outcomes.
- The efficacy of THD is influenced by the severity of the hemorrhoidal disease. Research has demonstrated a high overall success rate of 97.3% for THD in treating grades II, III, and IV hemorrhoidal disease absent ischemic changes.[2)]
- While there's no reported incidence rate for horseshoe abscess post-THD, perianal abscesses are documented complications, occurring in approximately 0.8% of cases.[3)]
- The likelihood of such complication may be contingent upon variables including the severity of the hemorrhoids and the surgeon's expertise.
- It is essential for surgeons to recognize the possibility of this complication and to vigilantly observe patients for any indications of infection or abscess development subsequent to THD.

CONCLUSION

- THD is a proven effective treatment modality for internal hemorrhoids. However, there is a potential risk for the development of horseshoe abscesses, particularly in patients with high-risk profiles.
- Prompt recognition and appropriate intervention are critical to averting severe complications associated with such conditions.

REFERRENCES

1) Morinaga K, Hasuda K, Ikeda T: A novel therapy for internal hemorrhoids: ligation of the hemorrhoidal artery with a newly devised instrument (Moricorn) in conjunction with a Doppler flowmeter. Am J Gastroenterol. 1995, 90:610-3.
2) Verre L, Gallo G, Grassi G, et al.: Transanal hemorrhoidal dearterialization (THD) for hemorrhoidal disease: an Italian single-institution 5-year experience analysis and updated literature review. Front Surg. 2022, 9:1088546. 10.3389/fsurg.2022.1088546
3) Bjelanovic Z, Draskovic M, Veljovic M, Lekovic I, Karanikolas M, Stamenkovic D: Transanal hemorrhoid dearterialization is a safe and effective outpatient procedure for the treatment of hemorrhoidal disease. Cir Esp. 2016, 94:588-94. 10.1016/j.ciresp.2016.07.002