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Case Study

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Tenesmus in palliative care: a case study

Abstract

Aims: To present a case of refractory tenesmus in a patient with metastatic rectal cancer and to highlight a comprehensive, opioid-based, multidisciplinary approach to symptom management in a palliative care context. **Methods:** A 29-year-old male with metastatic rectal adenocarcinoma experienced severe tenesmus unresponsive to standard opioids. A tailored pain management plan was developed, incorporating opioid rotation, adjunctive therapies, and input from a multidisciplinary team.

Results: Initial use of transdermal fentanyl and oral oxycodone failed to control symptoms. Transition to intravenous fentanyl infusion with rescue dosing, followed by the addition of methadone, resulted in partial relief but required careful monitoring due to respiratory depression. The incorporation of pregabalin, duloxetine, topical lidocaine, and nifedipine resulted in a marked improvement in symptoms and a decreased need for breakthrough analgesia.

Conclusion: Refractory tenesmus in advanced malignancy may require a flexible, multimodal treatment strategy. This case underscores the importance of individualized care plans, opioid rotation, and integration of non-opioid therapies for adequate symptom control.

Keywords: tenesmus, palliative care, opioid therapy, rectal adenocarcinoma, methadone, pain management

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Introduction

Rectal cancer is a malignant tumor in the rectum (the part of the large intestine). Predisposing factors include Age (usually 50+), family history, unhealthy diet, smoking, or inflammatory bowel disease Usually, patients complain of Rectal bleeding, changes in bowel habits, abdominal pain, Tenesmus and unexplained weight loss. It can be detected via colonoscopy and imaging and treated with surgery, radiation, chemotherapy, or targeted therapy. Tenesmus is a distressing and persistent sensation of incomplete bowel evacuation, often accompanied by pain. It is commonly encountered in patients with pelvic malignancies, particularly rectal cancer. Effective management can be challenging, especially in advanced stages, where standard therapies often fail to meet expectations. This report illustrates the complexities of treating refractory tenesmus in a palliative care setting.[1]

Case presentation

A 29-year-old male with metastatic rectal adenocarcinoma, involving the liver and lungs, was undergoing second-line therapy with durvalumab and cabozantinib. He presented with severe tenesmus and a history of intestinal obstruction managed by colonic stent placement and Botox injection for an anal fissure. The patient was morphine-dependent and frequently sought emergency care due to uncontrolled pain. Upon admission, fentanyl infusion with rescue dosing was initiated and escalated. Methadone was introduced, but it caused respiratory depression, which required naloxone reversal. A comprehensive regimen—including pregabalin, duloxetine, topical lidocaine, and nifedipine—was added, resulting in significant symptom improvement within 48 hours.

Discussion

Tenesmus remains a significant challenge in palliative care, particularly in metastatic rectal cancer. This case emphasizes the necessity of a personalized and adaptive approach when conventional opioids prove ineffective.

Despite escalating doses of intravenous fentanyl and frequent rescue medications, the patient's symptoms persisted. A low-dose methadone trial, inspired by prior successful case reports, was attempted but discontinued due to adverse effects.

The inclusion of adjunctive agents, including neuropathic pain modulators and topical therapies, proved crucial. Lidocaine and nifedipine addressed localized discomfort and spasm, while pregabalin and duloxetine targeted the neuropathic component.

This case supports the growing body of evidence favoring multimodal, interdisciplinary strategies for managing malignant tenesmus, especially in complex and opioid-resistant cases.

The patient initially required escalating doses of intravenous fentanyl, with frequent rescue dosing, yet minimal relief was observed clinically. Methadone was trialed at a low dose, informed by its use in other patients with complex or opioid-resistant cancer pain.[2] A systematic review by Mueller found that methadone provided relief in patients with refractory tenesmus following failed morphine titration.[3] However, respiratory depression developed shortly after initiation, leading us to discontinue it.

After the analgesic plan was expanded to include several adjuvant therapies, a significant improvement was observed. **Topical lidocaine** was applied to relieve mucosal irritation and localized discomfort, as supported by case-based evidence studies.[4,5] More case-based evidence supports the use of calcium channel blockers for alleviating local spasm in patients with tenesmus associated with rectal cancer.[6]

While pregabalin and duloxetine were introduced to address the neuropathic pain component, gabapentinoids were found to be

potentially effective. They may help relieve cancer-related rectal or vesical tenesmus through several mechanisms, although the exact pathways remain unclear.[7]

Studies characterizing tenesmus as a symptom that may not respond to single management alone are consistent with our observation of the limited response to opioid escalation alone and the subsequent improvement with multimodal agents, highlighting the limited evidence available to guide choices for treatment.[8,9]

An adjustment in approach, going beyond opioid escalation and combining drugs from other classes, was ultimately what resulted in improvement. Rarely does a single intervention offer total relief in the management of tenesmus. The most effective approach to alleviating tenesmus is often a customized, flexible treatment plan based on the patient's response and interdisciplinary input.

Conclusion

Tenesmus in advanced malignancy is challenging to treat and often unresponsive to opioids alone. Effective symptom control requires a multimodal, patient-specific approach involving opioid rotation, adjuvants, and interdisciplinary collaboration. This case highlights the importance of vigilant monitoring and flexible treatment planning to enhance comfort and quality of life in palliative care settings.

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Conflicts of interest

The authors declare that there are no conflicts of interest.

References

1. Dr. José L Pereira. Pallium Canada. Pallium palliative pocketbook. 2nd ed. Ottawa: Pallium Canada; p. 243. 2020.
2. Furst P. The use of low-dose methadone as an add-on to ongoing opioid treatment in palliative cancer care—an underrated treatment?. Life (Basel). 2022;12(5):679.
3. Mueller K, Karimuddin AA, Metcalf C, et al. Management of malignant rectal pain and tenesmus: A systematic review. *Journal of Palliative Medicine*. 2020 Jul 1;23(7):964–971.
4. Ali SK, Abdulkarim S. Treatment of anal cancer pain – a case report. J Pain Symptom Manage. 2018;56(1):e1–e2.
5. Badin S, Iqbal A, Sikder M, et al. Persistent pain in anal cancer survivors. J Cancer Surviv. 2008;2(2):79–83.
6. Stowers KH, Hartman AD, Gustin J. Diltiazem for the management of malignancy-associated perineal pain and tenesmus. J Palliat Med. 2014;17(9):1075–1077.
7. Matsuda Y, Kawano Y, Matsuda K, et al. Effectiveness of gabapentinoids for cancer-related rectal and vesical tenesmus: report of four cases. Indian J Palliat Care. 2020;26(3):381–384.
8. Mueller K, Karimuddin AA, Metcalf C, et al. Management of malignant rectal pain and tenesmus: a systematic review. J Palliat Med. 2020;23(7):964–971.
9. Ní Laoire Á, Fettes L, Murtagh FE. A systematic review of the effectiveness of palliative interventions to treat rectal tenesmus in cancer. Palliat Med. 2017;31(10):975–981.