Impact Surgery

Case Report

e-ISSN: 3033-4470

Mesenteric Desmoid Tumour in an Octogenarian: A Rare Case from Rural Eastern Nigeria

Patrick Ashinze[1], Bonu Innocent Shu[2], Yetunde Morayo Oladipupo[3], Emmanuel Egbunu[4], Ahmed Adeshina Abdulbasit[5], Atere Ahmad Olawale[1], Eniola Obafemi[1]

Correspondence: Dr Patrick Ashinze, University of Ilorin Teaching Hospital, Ilorin, Nigeria. Email: patrickashinze@yahoo.com

Abstract

Introduction: Mesenteric desmoid tumours are rare, locally aggressive fibroblastic neoplasms comprising just 0.03% of all tumours. They typically affect younger adults and may be associated with familial adenomatous polyposis (FAP), trauma, or prior abdominal surgery. Diagnosis is challenging due to imaging similarities with other intra-abdominal masses, and treatment must be tailored to tumour behaviour and patient factors.

Case Report: We report the case of an 85-year-old woman from rural Nigeria presenting with a six-month history of abdominal discomfort, early satiety, and weight loss. Examination revealed a firm, mobile abdominal mass. CT imaging showed a large mesenteric mass, but the patient had no history of FAP, trauma, or surgery. Comorbid hypertension and ECG findings of first-degree heart block elevated surgical risk. In view of limited access to advanced therapies and her frailty, a conservative management plan was adopted.

Discussion: This case highlights the importance of considering desmoid tumours in elderly patients and adapting management to local resources and comorbid conditions. While surgery remains a mainstay of treatment, conservative strategies may be preferable in high-risk or resource-limited settings. Broader access to emerging therapies is needed to improve outcomes in underserved populations.

1 University of Ilorin Teaching Hospital, Ilorin, Nigeria

2 Federal Medical Centre, Keffi, Nigeria

3 University College Hospital, University of Ibadan, Ibadan, Nigeria

4 Federal Medical Centre Bida, Nigeria

5 Federal Medical Centre, Ebute Metta, Lagos, Nigeria

Cite as: Ashinze, P., Bonu, I. S., Oladipupo, Y. M., Egbunu, E., Adeshina , A. A., Atere, A. O., & Obafemi , E. Mesenteric Desmoid Tumour in an Octogenarian: A Rare Case from Rural Eastern Nigeria. *Impact Surgery*, 2(4), 146–148. https://doi.org/10.62463/surgery.191

Introduction

Mesenteric desmoid tumours are rare fibroblastic neoplasms, representing approximately 0.03% of all tumours, with a global incidence of 2–4 cases per million annually[1]. These lesions may occur sporadically or in association with familial adenomatous polyposis (FAP), prior abdominal surgery, or trauma[2]. They are locally aggressive but non-metastatic, driven by Wnt/β-catenin pathway dysregulation via CTNNB1 mutations or APC inactivation[1].

Desmoid tumours frequently mimic other intra-abdominal pathologies on imaging, including gastrointestinal stromal tumours and lymphoma[3□4]. Ultrasound and CT are commonly employed but lack specificity; MRI offers superior soft-tissue characterisation but is often inaccessible in low-resource settings[5]. Histological analysis with β-catenin immunohistochemistry remains the diagnostic standard[6].

Although surgical resection remains the mainstay for symptomatic or progressive disease, recurrence rates approach 40%[2]. Conservative management, including active surveillance or systemic therapy, is increasingly used for stable or unresectable lesions[7]. Nirogacestat, a γ-secretase inhibitor, recently demonstrated efficacy in improving progression-free survival in desmoid tumour patients[8].

Case Report

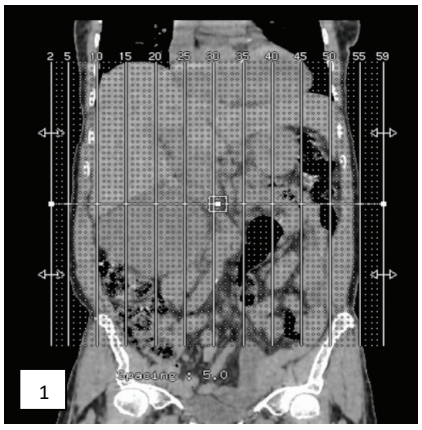
An 85-year-old woman from Obike, Imo State, Nigeria, presented with a 6-month history of progressive abdominal discomfort, early satiety, and an 8 kg weight loss over four months. Examination revealed a firm, mobile mass in the right hemi-abdomen (~10 cm), without signs of peritonism. Bowel sounds were normal, and there was no evidence of ascites or organomegaly. Her only comorbidity was hypertension (160/95 mmHg).

CT imaging identified a heterogeneously enhancing mesenteric mass measuring 138 × 77 × 109 mm, displacing adjacent structures. There was no history of FAP, prior surgery, or abdominal trauma. The absence of known risk factors and advanced age made this an atypical presentation, in contrast to younger adults commonly affected[2]. Previously reported cases include a 38-year-old postpartum woman with jejunal mesentery involvement[9] and a 31-year-old man following appendicitis[10].

Due to the patient's age, comorbid hypertension, and ECG evidence of first-degree heart block, surgical intervention posed significant risk. Additionally, access to newer systemic therapies such as nirogacestat was unavailable in the rural healthcare setting. After multidisciplinary discussion, conservative management was chosen, aligning with current guidance for older patients with comorbidities and stable tumours[7].

Discussion

This case highlights the importance of considering mesenteric desmoid tumours in elderly patients, despite their typical occurrence in younger populations. Clinical and radiological diagnosis remains challenging, particularly in low-resource environments, often necessitating histological confirmation. While surgical excision remains a cornerstone of treatment, high recurrence rates and patient-specific risks may warrant conservative approaches.



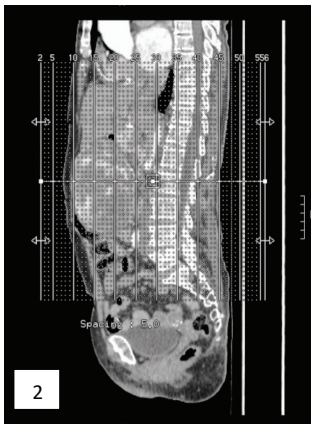


Figure 1. Figure 1: Coronal view CT scan of the abdomen showcasing round mass in the infrahepatic region.
Figure 2: Sagittal view CT scan of the abdomen

Access to novel therapies remains limited in many parts of the world, reinforcing the need for context-adapted treatment protocols and expanded access to modern therapeutics. Future research should prioritise non-invasive strategies and equitable healthcare delivery for rare tumour patients in underserved regions.

Acknowledgements, competing interests, and data sharing: The authors would like to acknowledge The Lind League, Nigeria. The authors hold written patient consent for permission to publish. We declare no competing interests and no funding was received. Radiographs and treatment plan available upon request from the authors based at the Divine Mercy Medical Centre, Ochicha-Obike, Imo state, Nigeria.

GAIT statement[11] for Generative AI use: Generative AI was used for language editing in this manuscript. No content generation, data analysis, or substantive rewriting was performed. The authors take full responsibility for the accuracy and integrity of the work.

References

1. Master SR, Mangla A, Shah C. Desmoid Tumor. [Updated 2024 Mar 1]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan. Available from: https://www.ncbi.nlm.nih.gov/books/NBK459231/

2. Escobar C, Munker R, Thomas JO, Li BD, Burton GV. Update on desmoid tumors. Ann Oncol. 2012;23(3):562–9. doi:10.1093/annonc/mdr386

3. Walczak BE, Rose PS. Desmoid: the role of local therapy in an era of systemic options. Curr Treat Options Oncol. 2013;14:465–73. doi:10.1007/s11864-013-0235-7

4. Chen CB, Chiou YY, Chen CH, et al. Sonographic and computed tomography findings of intra-abdominal desmoid tumor. J Chin Med Assoc. 2010;73:393–5. doi:10.1016/S1726-4901(10)70084-8

5. Spiridakis K, Panagiotakis G, Grigoraki M, et al. Isolated giant mesenteric fibromatosis (intra-abdominal desmoid tumors). Case report. Giorn Chir. 2008;29(10):413–6.

6. Monneur A, Chetaille B, Perrot D, et al. Dramatic and delayed response to doxorubicin-dacarbazine chemotherapy of a giant desmoid tumor: case report and literature review. Case Rep Oncol. 2013;6(1):127–33. doi:10.1159/000349918

7. Bonvalot S, Desai A, Coppola S, et al. The treatment of desmoid tumors: a stepwise clinical approach. Ann Oncol. 2012;23:x158–66.

8. Gounder M, Ratan R, Alcindor T, et al. Nirogacestat, a γ-Secretase Inhibitor for Desmoid Tumors. N Engl J Med. 2023;388(10):898–912. doi:10.1056/NEJMoa2213254

9. Pop M, Bartos D, Anton O, et al. Desmoid tumor of the mesentery. Case report of a rare non-metastatic neoplasm. Med Pharm Rep. 2021;94(2):256–9. doi:10.15386/mpr-1620

10. Khaled N, El Bouardi I, Chaouche M, et al. A Case Report about a Mesenteric Desmoid Tumor Mimicking an Appendicular Abscess: A Rare Complication of a Rare Mesenteric Mass. Int J Acad Health Med Res. 2023;7(2):73–7.

11. GAIT 2024 Collaborative Group. Generative Artificial Intelligence Transparency in scientific writing: the GAIT 2024 guidance. Impact Surgery. 2025 Jan. 29;2(1):6-11.