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BENIGN YET DECEPTIVE: A 19-YEAR-OLD MALE WITH A RECTAL MASS MIMICKING CARCINOMA, ULTIMATELY DIAGNOSED AS COLITIS CYSTICA PROFUNDA

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ABSTRACT

Background: We report a rare case of a healthy 19-year-old male with a rectal mass mimicking advanced carcinoma on endoscopy and imaging. Final histopathology following excisional biopsy confirmed a rare benign entity—colitis cystica profunda (CCP). Recognizing this condition is essential to prevent misdiagnosis and unnecessary radical treatment.

Case report: A 19-year-old male with no past medical or surgical history presented with several weeks of non-bloody diarrhoea. Colonoscopy revealed an ulcerated, irregular, friable mass 7 cm from the anal verge with infiltrative features. A computed tomography scan of the chest, abdomen and pelvis and pelvic magnetic resonance imaging demonstrated a rectal mass invading the muscularis propria and multiple regional lymph nodes (largest ≈6 mm), suggesting T4N2 staging. Two colonoscopies by different endoscopists with deep biopsies showed no malignancy. A third excisional biopsy with expert histopathology confirmed CCP. The patient was managed conservatively and remained asymptomatic at 12-month follow-up with stable endoscopic and radiologic findings.

Conclusion: Although rare, CCP should be considered in the differential diagnosis of rectal masses—especially in young patients—when imaging and endoscopy mimic malignancy but histology is benign. A multidisciplinary approach, with repeat or excisional biopsy and close clinicopathologic correlation, is key to avoiding overtreatment.

KEYWORDS

Rectal mass, colitis cystica profunda, adolescent colorectal lesion, diagnostic mimic, multidisciplinary diagnosis

LEARNING POINTS

- Colitis cystica profunda is a benign condition that may closely mimic advanced rectal carcinoma on both endoscopic and radiologic evaluation, leading to significant diagnostic confusion.
- Persistent discordance between imaging and histology warrants deeper biopsies and multidisciplinary team review before considering radical intervention.
- In young adults presenting with rectal masses, clinicians must consider both malignant (e.g., adenocarcinoma, lymphoma) and rare benign entities such as colitis cystica profunda. Careful pathology review, correlation with imaging, and genetic counselling when appropriate are essential.

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INTRODUCTION

Rectal masses are rare in adolescents and young adults, and benign conditions may mimic malignancy, posing diagnostic challenges. One such rare entity is colitis cystica profunda (CCP), a benign disorder characterized histologically by mucin-filled cysts within the submucosa of the colon or rectum. Despite its benign nature, CCP can present with ulceration, mass effect, and radiological features that closely resemble carcinoma. Reports of CCP in the paediatric and adolescent population are exceedingly limited. We describe a 19-year-old male whose endoscopic and radiologic findings strongly suggested advanced rectal carcinoma, but whose excisional biopsy and final histology confirmed CCP. This case underscores the importance of multidisciplinary correlation to avoid overtreatment.

CASE DESCRIPTION

A 19-year-old male with no medical or surgical history presented with 4 weeks of non-bloody diarrhoea and mild tenesmus. There were no rectal bleeding, weight loss, or systemic symptoms.

Colonoscopy demonstrated an ulcerated, irregular, friable mass located approximately 7 cm from the anal verge, with elevated rolled edges and an exophytic, partially circumferential morphology causing luminal narrowing. The remaining colonic mucosa appeared normal. Given the suspicious appearance, a computed tomography scan of the chest, abdomen, and pelvis, along with magnetic resonance imaging (MRI) of the pelvis, was performed. Imaging showed an eccentric rectal mass invading the muscularis propria with several regional lymph nodes (largest 6 mm), staged radiologically as T4N2 without distant metastases. Routine tumour markers including carcinoembryonic antigen and carbohydrate antigen 19-9 were within normal limits.

Multidisciplinary review initially recommended neoadjuvant chemoradiotherapy followed by resection. However, the first two sets of colonoscopic biopsies—performed by different endoscopists with deep sampling—revealed benign colonic mucosa without dysplasia or malignancy. Owing to the discordance between radiological findings and histology, a third excisional biopsy was undertaken. Histopathology review demonstrated mucin-filled cystically dilated glands located in the submucosa, lined by benign columnar epithelium and surrounded by fibrotic stroma with chronic inflammatory infiltrate. No cytologic atypia or evidence of invasion was identified, confirming a diagnosis of CCP.

Given the benign diagnosis, radical oncologic surgery was deferred. The patient was managed conservatively with dietary modification, symptom monitoring, and surveillance colonoscopy. At 12-month follow-up, he remained asymptomatic with stable lesion appearance on serial MRI and colonoscopy.

DISCUSSION

CCP is a rare benign condition that may present as an ulcerated rectal mass with transmural invasion and lymphadenopathy, mimicking rectal cancer both endoscopically and radiologically.

The hallmark of CCP is the presence of mucin-filled cystically dilated glands extending into the submucosa or deeper layers, lined by benign epithelium and surrounded by fibromuscular and inflammatory tissue[1,2]. These features can be misinterpreted as invasive mucinous carcinoma, especially when submucosal biopsy is inadequate. In our case, only the third, excisional biopsy provided definitive evidence of CCP, highlighting the importance of deep and targeted sampling when there is discordance between imaging and histology.

CCP has been described as part of the mucosal prolapse spectrum, frequently associated with solitary rectal ulcer syndrome and chronic mucosal trauma[3,4]. Although our patient had no overt prolapse symptoms, the lesion's location on the anterior rectal wall (7 cm from the anal verge)

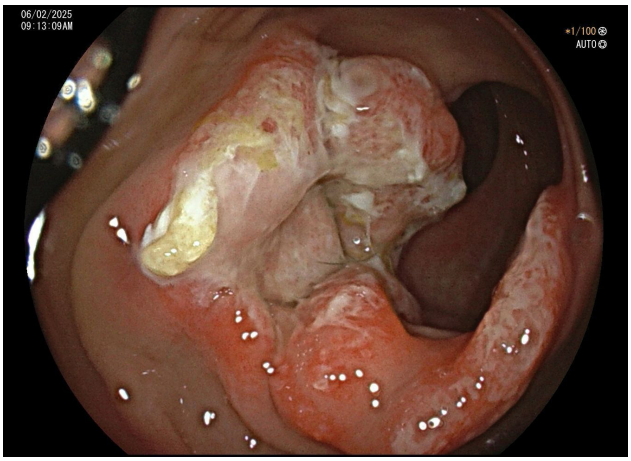


Figure 1. Colonoscopy image of the rectal lesion. An ulcerated, friable, circumferential rectal mass seen at 7 cm from the anal verge, with rolled edges and infiltrative features mimicking carcinoma.

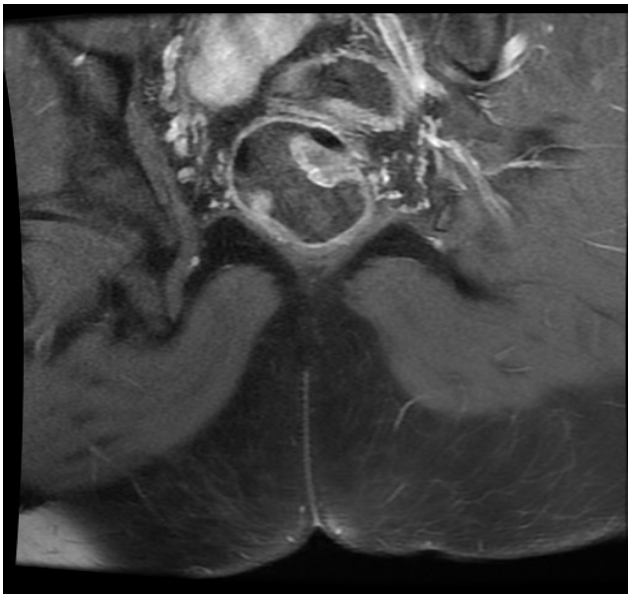


Figure 2. Magnetic resonance imaging of the pelvis axial T2-weighted image. Shows eccentric rectal mass invading the muscularis propria, with enlarged perirectal lymph nodes (largest ~6 mm), consistent with T4N2 appearance.

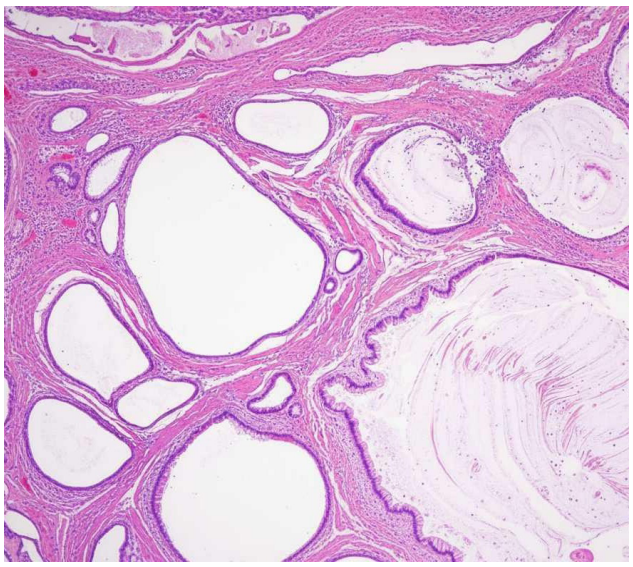


Figure 3. Histopathology (H&E stain). Cystically dilated glands in the submucosa, filled with mucin and lined by benign epithelium, without cytologic atypia—features consistent with colitis cystica profunda.

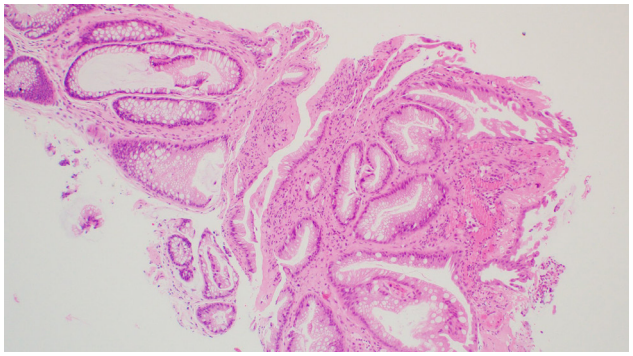


Figure 4. Histopathology (H&E stain). Benign-appearing glandular epithelium with surrounding fibrotic stroma and chronic inflammatory infiltrates.

is consistent with sites commonly subjected to shearing and ischemic injury. Such subtle mechanical factors may underlie the pathogenesis in young adults without classical prolapse history[5].

Radiologically, CCP can appear as a polypoid or infiltrative mass with wall thickening and even reactive lymphadenopathy, leading to over staging[2,6]. Rectal resections have been performed for presumed carcinoma, later confirmed as CCP[6,7]. Hence, a multidisciplinary approach, including experienced gastrointestinal pathologists and colorectal surgeons, is essential to prevent overtreatment.

Management of CCP is generally conservative, focusing on symptom control and follow-up. Surgery is reserved for large, symptomatic, or diagnostically uncertain cases[1,8]. Our patient was treated conservatively with regular clinical, endoscopic, and MRI surveillance, remaining asymptomatic at 1 year. This outcome reinforces the importance of correlating histopathology with clinical and imaging data to avoid misdiagnosis and preserve quality of life.

This case adds to the limited literature describing CCP in young adults and underscores that a benign lesion can mimic malignancy across all diagnostic modalities. Awareness of this entity, repeated deep biopsies, and multidisciplinary correlation are crucial steps in preventing unnecessary radical surgery.

CONCLUSION

This case demonstrates how CCP can masquerade as rectal cancer in young adults. Benign lesions with alarming features can prompt unnecessary intervention unless properly diagnosed. Repeat or excisional biopsy, combined with multidisciplinary review, is key to achieving diagnostic clarity and preventing overtreatment.

REFERENCES

1. Ayantunde AA, Strauss C, Sivakkolunthu M, Malhotra A. Colitis cystica profunda of the rectum: An unexpected operative finding. *World J Clin Cases* 2016;**4**:177-180. doi: 10.12998/wjcc.v4.i7.177
2. Bhagwanani A, Kearns C, Vijan A, Brun-Vergara ML. Colitis Cystica Profunda. *Radiographics* 2023;**43**:e230184. doi: 10.1148/rg.230184
3. Kornprat P, Langner C, Pfeifer J, Mischinger HJ. Colitis cystica profunda associated with rectal prolapse: report of a case. *Int J Colorectal Dis* 2007;**22**:1555-1556. doi: 10.1007/s00384-006-0268-5
4. Zhu QC, Shen RR, Qin HL, Wang Y. Solitary rectal ulcer syndrome: clinical features, pathophysiology, diagnosis and treatment strategies. World *J Gastroenterol* 2014;20:738-744. doi: 10.3748/wjg.v20.i3.738
5. Rumi N, Cilla S, De Ninno M, Berardi S, Spera G, D'amico R, et al. Colitis cystica profunda of the rectum with adenomatous dysplastic features: Radiologic-pathologic correlation. *Radiol Case Rep* 2019;**14**:740-745. doi: 10.1016/j.radcr.2019.03.014
6. Spicakova K, Pueyo BA, de la Piscina PR, Urtasun L, Ganchegui I, Campos A, et al. Colitis cystica profunda: A report of 2 cases with a 15-year follow-up. *Gastroenterol Hepatol* 2017;**40**:406-408. English, Spanish. doi: 10.1016/j.gastrohep.2016.04.011
7. Zaki TA, Mbah M, Mir M, Sims RD, Amin A, Shah SL. Colitis Cystica Profunda: A Rare Mimicker of Colorectal Neoplasia. *Dig Dis Sci* 2022;**67**:2693-2695. doi: 10.1007/s10620-022-07544-2
8. Jiang Q, Qin S, Zhang H, Liu G. Colitis cystica profunda: A report of two cases. *Clin Case Rep* 2023;**11**:e8042. doi: 10.1002/ccr3.8042