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## RESEARCH ARTICLE

# CUTANEOUS METASTASES FROM COLORECTAL CANCER: A CASE REPORT WITH A LITERATURE REVIEW

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## Abstract

**Background:** Cutaneous metastases from colorectal cancer are rare and usually reflect advanced systemic disease. Their clinical presentation is often nonspecific, which may lead to delayed diagnosis. Understanding the characteristics, timing of presentation, and prognostic significance of these lesions is essential for clinicians managing colorectal cancer patients.

**Methods:** We report the case of a 65-year-old man who developed a hypogastric cutaneous metastases two years after surgical resection of a colonic adenocarcinoma. Clinical examination, imaging, and histopathology confirmed the diagnosis. A review of the literature was conducted to summarize epidemiology, common clinical patterns, diagnostic approaches, and prognostic implications of cutaneous metastases originating from colorectal cancer.

**Results:** The patient presented with firm abdominal nodules shortly after completing his first chemotherapy cycle. Concurrent imaging revealed pulmonary involvement. Literature findings indicate that cutaneous metastases most frequently appear near surgical scars or the abdominal wall and are strongly associated with disseminated disease. Reported survival after the appearance of skin metastases is generally limited, emphasizing their value as a marker of poor prognosis.

**Conclusion:** This case highlights the importance of clinical awareness regarding new skin lesions in patients with a history of colorectal cancer. Early recognition and biopsy are essential for accurate diagnosis. The literature confirms that cutaneous metastases represent advanced disease and carry significant prognostic implications, reinforcing the need for timely multidisciplinary evaluation and management.

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## Introduction:-

Colorectal carcinoma commonly spreads to the liver and lungs, whereas cutaneous or subcutaneous metastases represent an uncommon pattern of dissemination, occurring in approximately 5% of metastatic cases [1–2]. Regardless of tumor origin, cutaneous involvement is widely regarded as a marker of advanced disease and is often associated with a poor prognosis [3,4].

Although recurrence after treatment of colorectal carcinoma is generally uncommon, cutaneous metastasis can still occur. Such presentations remain exceptional and highlight the need for careful long-term surveillance.

Here, we describe the case of a 65-year-old man who developed a hypogastric cutaneous metastasis two years after resection of a colonic adenocarcinoma, illustrating this rare but clinically significant manifestation of disease progression.

#### **Case Report:**

A 65-year-old man presented to our outpatient clinic with a progressively enlarging lesion in the hypogastric region. Clinical examination revealed a firm, multinodular cutaneous mass with surrounding induration and several smaller satellite nodules in the adjacent skin (Figure 1). A linear scar was visible beneath the central lesion, corresponding to his previous abdominal surgery.

The patient had a known history of colonic adenocarcinoma. Two years earlier, he had undergone right hemicolectomy for a mucinous adenocarcinoma. Histopathological analysis at that time had shown lymphovascular invasion, and the tumor was staged as T3N1M0. He subsequently completed six months of adjuvant chemotherapy with a 5-fluorouracil-based regimen. His postoperative follow-up examinations had been unremarkable, and no signs of recurrence were noted during routine surveillance.

Two years after surgery, the patient reported the appearance of a small hypogastric nodule that gradually increased in size. An abdominal CT scan was performed, revealing a localized cutaneous-subcutaneous lesion without evidence of intra-abdominal or distant metastases (Figure 2,3). No thoracic, hepatic, or peritoneal involvement was detected.

Given the localized nature of the lesion, surgical excision was planned. The patient underwent complete resection of the hypogastric mass with clear margins (Figure 4). Histopathological evaluation of the specimen demonstrated adenocarcinomatous glands consistent with metastasis from the previously diagnosed mucinous colonic adenocarcinoma. Immunohistochemical staining supported the diagnosis.

Following surgery, the patient recovered well and remained in good general condition. He is currently undergoing oncological evaluation to determine the most appropriate adjuvant management strategy. Ongoing follow-up includes periodic clinical examinations, imaging, and tumor marker monitoring. Long-term follow-up will help determine disease progression, response to additional treatment, and survival outcomes.

#### **Discussion:-**

Cutaneous metastases from colorectal cancer (CRC) are uncommon but clinically significant manifestations of systemic disease progression. A recent meta-analysis reviewing reports from 1990 to 2023 confirmed their rarity, compiling nearly 100 published cases, most of which were individual case reports or small series [5].

#### **Incidence, timing, and typical sites:**

Cutaneous metastases occur in approximately 2.3%–6% of metastatic CRC cases [6,7], reflecting the overall infrequency of cutaneous involvement among visceral malignancies. The abdominal wall is the most frequently reported site, often in proximity to surgical scars, suggesting local implantation or locoregional spread [6,8]. Less common sites include the scalp, face, extremities, perineum, and axillae [7].

Regarding timing, most skin metastases appear within the first two years after primary tumor resection [7,9], though several series describe later presentations, including cases detected up to five years post-treatment [10,11]. In the meta-analysis by Tokarski et al., 61% of cutaneous metastases were metachronous, occurring after initial CRC management [5]. Our patient's presentation two years after right hemicolectomy fits this typical timeline.

#### **Pathogenesis**

The mechanisms underlying cutaneous dissemination of colorectal cancer (CRC) remain incompletely understood and are likely multifactorial. Several pathways have been proposed to explain how malignant cells reach the skin:

#### **Lymphatic or hematogenous spread:**

Malignant cells may migrate through lymphatic channels or enter the systemic circulation, allowing dissemination to distant cutaneous or subcutaneous sites. This route is supported by the frequent association of skin metastases with advanced nodal or visceral involvement. Tumor cells circulating in the bloodstream can lodge in dermal capillaries,

subsequently proliferating to form clinically detectable nodules [11].

#### **Surgical implantation or tumor seeding:**

Iatrogenic implantation of tumor cells along surgical incisions is a well-recognized mechanism, particularly for abdominal wall metastases. During colectomy or laparoscopic procedures, manipulation of the tumor may release malignant cells that adhere to the wound site. These cells can remain dormant or proliferate later, resulting in metastasis along a previous scar. This phenomenon explains why many cutaneous lesions occur precisely at or near the surgical site [8,11].

#### **Direct extension from intra-abdominal disease:**

Although less common, tumor deposits may arise from contiguous spread of peritoneal or subperitoneal disease directly through fascial planes into the skin. This mechanism is more frequently observed in patients with extensive peritoneal carcinomatosis or locally advanced recurrent disease [8].

#### **Possible molecular and microenvironmental contributors (emerging data):**

Recent studies suggest that certain molecular subtypes—such as mucinous tumors, BRAF-mutated cancers, or tumors exhibiting epithelial-to-mesenchymal transition—may have a greater propensity for atypical metastatic patterns, including cutaneous involvement. Alterations in adhesion molecules, chemokine receptors, and tumor–stromal interactions may facilitate preferential homing to the skin, although these hypotheses require further investigation.

Given the location of our patient’s lesion immediately adjacent to the prior surgical incision, locoregional lymphovascular dissemination or surgical implantation during the original procedure represent the most plausible mechanisms. The absence of intra-abdominal recurrence on imaging makes direct extension unlikely in this case.

#### **Clinical presentation and diagnostic considerations**

Cutaneous metastases exhibit highly variable morphology, which contributes to their diagnostic challenge. They may present as firm dermal or subcutaneous nodules, either solitary or multiple, as frequently reported in the literature [6,12]. In other cases, lesions appear as plaques or multinodular masses with preserved overlying skin, making clinical suspicion more difficult [6,12]. Some patients develop ulcerated or inflammatory-appearing lesions that closely mimic benign dermatologic conditions—such as cysts, abscesses, or dermatitis—often leading to delayed diagnosis and further investigation [13,9]. In our patient, the lesion presented as a solitary, firm, hypogastric subcutaneous nodule with intact overlying skin, a presentation that aligns with these commonly described clinical patterns. This broad clinical heterogeneity underscores the need for careful examination and a low threshold for biopsy in any atypical or persistent skin lesion among colorectal cancer survivors.

In rare cases, a cutaneous lesion may represent the first sign of CRC recurrence, or even the first indication of an otherwise occult malignancy [4,14]. Because tumor markers such as CEA are often normal at the time of skin relapse [15], early biopsy remains essential for diagnosis. Immunohistochemistry typically confirms colorectal origin.

Overall, these factors highlight the diagnostic complexity of cutaneous metastases, emphasizing that prompt recognition relies on clinical vigilance, early tissue sampling, and multidisciplinary evaluation to avoid delays that may impact patient outcomes.

#### **Prognosis and management**

Cutaneous metastasis generally portends a poor prognosis. In Tokarski’s meta-analysis, the median survival after diagnosis of skin metastasis was 5.5 months (IQR 3–10 months) [5]. Earlier series reported median survivals ranging from 4 to 18 months depending on disease burden and treatment [8].

Nevertheless, the same analysis demonstrated that active treatment—including surgical excision, systemic therapy, or radiotherapy—was associated with significantly improved survival (hazard ratio 0.15;  $p < 0.001$ ) [5]. This finding suggests that cutaneous metastases, although indicative of aggressive disease, may not be an immediate terminal event, particularly when the lesions are isolated.

For solitary and resectable lesions, wide local excision with clear margins remains the preferred approach [6,8]. Systemic therapy or radiotherapy may be added in multifocal disease or when visceral metastases coexist [6]. In

many patients, management remains palliative, but the potential for prolonged survival following active intervention supports individualized treatment planning.

In addition to surgical management, recent reports emphasize the importance of integrating systemic therapy tailored to tumor biology and overall disease burden. Tokarski et al. noted that patients receiving modern chemotherapy or targeted therapy experienced better outcomes than those managed with local treatment alone, underscoring the role of comprehensive oncologic care [5]. Similarly, Bittencourt et al. and Yüksel et al. highlighted that individualized therapeutic strategies—combining excision, chemotherapy, and, when indicated, radiotherapy—can help control local symptoms and potentially delay disease progression [6,7]. Gupta et al. further reported that even in cases with multifocal or recurrent lesions, multidisciplinary management provides improved symptom relief and may modestly extend survival [8].

Taken together, these findings reinforce that the management of cutaneous metastases should be personalized, combining local and systemic treatments whenever feasible, and guided by close coordination between surgeons and oncologists.

### **Implications for the present case**

Our patient's solitary hypogastric lesion—appearing two years after colectomy and occurring near a surgical scar—is consistent with the most common clinical pattern described in the literature. The absence of visceral disease at presentation made surgical excision appropriate, and emerging evidence suggests that such intervention may confer a survival benefit. Nonetheless, given the historically poor outcomes associated with skin metastases, close multidisciplinary monitoring is essential.

### **Ethical Considerations**

Written informed consent for publication of this case report and accompanying images was obtained from the patient. Ethical approval was not required for single-patient case reports according to our institutional guidelines.

### **Conclusion:-**

Although the patient initially presented with a localized colonic adenocarcinoma treated by curative surgery and adjuvant chemotherapy, the development of an isolated hypogastric cutaneous metastasis two years later highlights the unpredictable nature of colorectal cancer progression. Even in the absence of abnormal serum tumor markers and with no evidence of visceral recurrence on imaging, this form of relapse reflects a biologically active disease. This case underscores the need for vigilant long-term follow-up, regardless of apparently favorable initial prognostic features. It also reinforces the importance of investigating the molecular characteristics of colorectal tumors, as such analyses may help identify patients at risk for atypical patterns of recurrence. A better understanding of the underlying tumor biology could ultimately guide personalized surveillance strategies and tailored therapeutic approaches.

### **References:-**

- 1-Llaguna OH, Desai P, Fender AB, et al. Subcutaneous metastatic adenocarcinoma: an unusual presentation of colon cancer—case report and literature review. *Case Rep Oncol*. 2010;3:386–390. doi:10.1159/000321948.
- 2- Horiuchi A, Nozawa K, Akahane T, et al. Skin metastasis from sigmoid colon cancer. *Int Surg*. 2011;96:135–138. doi:10.9738/1391.1.
- 3- Schoenlaub P, Sarraux A, Grosshans E, et al. Survival after cutaneous metastasis: a study of 200 cases (in French). *Ann Dermatol Venereol*. 2001;128:1310–1315.
- 4-Lookingbill DP, Spangler N, Helm KF. Cutaneous metastases in patients with metastatic carcinoma: a retrospective study of 4020 patients. *J Am Acad Dermatol*. 1993;29:228–236. doi:10.1016/0190-9622(93)70173-Q.
- 5-Tokarski E, Conan PL, Picchi H, et al. Prognostic implications of cutaneous metastases in colorectal cancer: a comprehensive systematic review and meta-analysis. *Cancer Med*. 2025;14(18):e71197.
- 6-Bittencourt MJ, Imbiriba AA, Oliveira O, et al. Cutaneous metastasis of colorectal cancer. *An Bras Dermatol*. 2018;93:884–886.
- 7-Yüksel KM, Odabaşı E, Kemal Ö, Bakırtas M. Cutaneous metastasis of colon adenocarcinoma. *Turk J Surg*. 2018;34:237–239.
- 8-Gupta S, et al. Cutaneous metastasis of colon adenocarcinoma: case report and review of literature. *Surg Case Rep*. 2021;12:rjab571.

- 9-Sánchez-Hernández JM, et al. Cutaneous metastasis of colorectal cancer: making light on an unusual and misdiagnosed event. *Life (Basel)*. 2021;11:954. doi:10.3390/life11090954.
- 10-Parente P, Ciardiello D, Reggiani Bonetti L, et al. Cutaneous metastasis from colorectal cancer: making light on an unusual and misdiagnosed event. *Cancers*. 2021;13:3983. doi:10.3390/cancers13163983.
- 11-Sozen I, Small L, Kowalski M, et al. Scrotal metastases from colorectal carcinoma: a case report. *Cases Journal*. 2009;2:111. doi:10.1186/1757-1626-2-111.
- 12-Rossi G, et al. Soft tissue metastasis in colorectal cancer: a case report. *J Med Case Reports*. 2025;[à compléter].
- 13-Morgado M, et al. Cutaneous metastasis of rectal cancer as a diagnostic challenge: a clinical case and literature review. *J Oncol Cases Reports*. 2024;[à compléter].
- 14-Lo Russo G, Accarpio F, Spinelli GP, et al. Subcutaneous metastases from colon cancer: a case report. *J Med Case Reports*. 2012;6:212.
- 15-Liao LM, Cheng Q, Zhu G, et al. Cutaneous metastasis of ascending colon cancer harboring a BRAF V600E mutation: a rare case report. *Medicine*. 2020;99:e20026. doi:10.1097/MD.00000000000020026.