



# Mercurial Metastatic Merkel Cell Carcinoma: A Case of Colonic Involvement

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## ABSTRACT

Merkel cell carcinoma (MCC) is a neuroendocrine skin cancer that typically presents as a painless erythematous nodule on body surfaces visible to the sun. Metastatic disease is typical to the lymph nodes, liver, and lungs. There are previous case reports of patients with metastases to the gastrointestinal tract including the stomach, small intestine, and pancreas. To our knowledge, there are only rare occurrences of metastases to the colon. We report a patient with a history of MCC treated with chemotherapy who presented with hematochezia and underwent a colonoscopy that showed a partially obstructing, edematous, friable 7-cm circumferential mass in the transverse colon. Biopsy confirmed the diagnosis of MCC that metastasized to the transverse colon.

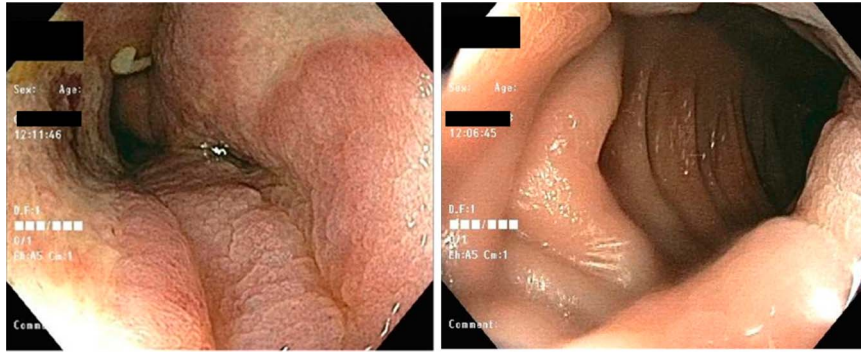
## INTRODUCTION

Merkel cell carcinoma (MCC) is a neuroendocrine skin cancer that is commonly found in whites who spend time outdoors, are immunocompromised, exposed to Merkel cell polyomavirus, or of older age; MCC is known for its poor prognosis.<sup>1</sup> MCC typically appears as a painless erythematous or violaceous nodule on body surfaces visible to the sun.<sup>1</sup> Metastatic disease is typical to the lymph nodes, liver, and lungs.<sup>1</sup> There are few cases reporting patients with metastases to the gastrointestinal (GI) tract, and to our knowledge, MCC only rarely metastasizes to the colon. We present a patient with MCC that metastasized to the transverse colon.

## CASE REPORT

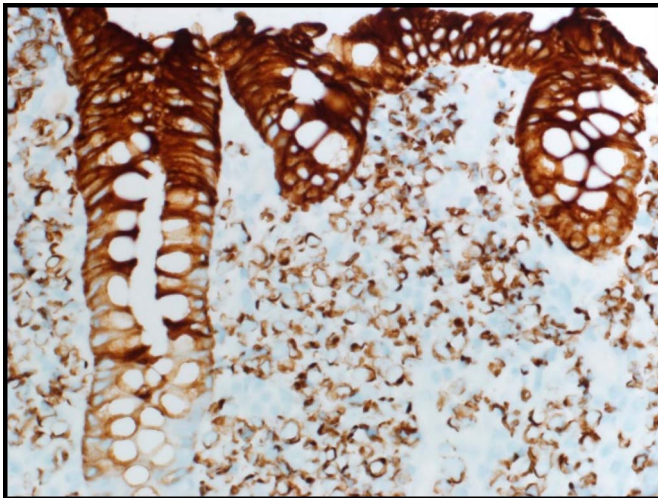
A 71-year-old Hispanic woman with a medical history significant for MCC diagnosed in 2014 and asthma was admitted to our facility for acute asthma exacerbation and found to have systolic heart failure. She subsequently decompensated and was diagnosed with a non-ST segment elevation myocardial infarction. Left heart catheterization showed an ejection fraction of 25%, likely related to stress cardiomyopathy; no significant coronary artery disease was found. The gastroenterology service was consulted for hematochezia and diarrhea that developed while the patient was in the hospital. Her physical examination was normal, and her laboratory values were white blood cell count of 8.9/ $\mu$ L, hemoglobin 10.8 g/dL, hematocrit 33.8%, platelets 240/ $\mu$ L, bilirubin 0.4 mg/dL, aspartate aminotransferase 24 U/L, alanine aminotransferase 31 U/L, and alkaline phosphatase 81 U/L.

The patient presented with a small bowel obstruction in 2014 and was diagnosed with MCC that metastasized to the jejunum, which was resected after receiving neoadjuvant chemotherapy with etoposide and carboplatin. There was no evidence that the patient had active MCC in any other part of her GI tract at that time, including a negative computed tomography of the chest, abdomen, and pelvis. Subsequent colonoscopy performed within 6 months of partial enterectomy did not show any findings of active disease in the colon. She followed up with her oncologist for 2 years after the diagnosis of jejunal metastasis and was subsequently graduated back to her primary care physician. A colonoscopy was completed during the admission in 2018, where a partially obstructing, edematous, and friable 7-cm circumferential mass was found in the transverse colon, without any ulceration being appreciated (Figure 1). Biopsy showed invasive neoplasm with features consistent with metastatic MCC. The malignant cells showed positive staining with



**Figure 1.** Colonoscopy showed a partially obstructing, edematous, and friable circumferential mass without any ulceration in the transverse colon.

Synaptophysin, chromogranin, blush with CD56, and negative staining with CK7 and TTF1 (Figure 2). The lymphoid cells were positive for CD45. The patient followed up with her



**Figure 2.** Biopsy showed invasive neoplasm with features consistent with metastatic Merkel cell carcinoma.

oncologist but decided to pursue hospice without palliative chemotherapy. The patient died approximately 6 months after colonoscopy showing newly found MCC of the transverse colon.

## DISCUSSION

MCC is a rare cancer that typically metastasizes to distant lymph nodes, liver, lungs, and bone.<sup>1</sup> There have been few cases reported of MCC metastasizing to other areas of the GI tract apart from the colon. These include the stomach and duodenum; stomach; ileocecal valve; small bowel mesentery; jejunum; stomach, pancreas, and distal duodenum; stomach, jejunum, and ileum; and pancreas.<sup>1–16</sup>

To our knowledge, there are only 4 case reports regarding MCC metastasizing to the colon (Table 1). Our patient is the fifth patient with MCC metastases to the colon, and the second specifically to the transverse colon.

This case report is an example of the rarity of MCC metastasizing to the GI tract, particularly the colon, and serves as

**Table 1. Cases of MCC that metastasized to the colon**

Authors	Patient	Symptoms	Site of metastases	Treatment	Outcome
This patient	71F with MCC of skin and jejunum in 2014	Hematochezia, diarrhea	Transverse colon	Pursued hospice	Died
Shalhub et al <sup>17</sup>	62M post-neck lesion excision thought to be basal cell carcinoma	Enlarged axillary and inguinal lymph nodes, 10 lbs weight loss	Descending colon, duodenum, stomach, lymph nodes, hip	Etoposide, carboplatin, and radiation therapy	Died
Huang et al <sup>18</sup>	76M with PMH of DM	Hematochezia, tenesmus, unspecified weight loss	Rectum	Proctectomy and coloanal anastomosis, on palliative chemotherapy	Clinical remission
Venes and Howle <sup>19</sup>	74M with PMH of head and neck MCC	Abdominal pain	Transverse colon	Etoposide, carboplatin, and radiation therapy	Clinical remission
Tuktamyshov et al <sup>20</sup>	70F with history of MCC, basal cell, and squamous cell carcinoma	Lower back pain, weakness	Ascending colon	Etoposide and cisplatin, and later cyclophosphamide, doxorubicin, and vincristine	Unknown

DM, diabetes mellitus; MCC, Merkel cell carcinoma; PMH, past medical history.

a reminder that a patient's history is an important marker of prediction of a mass. Biopsy is always warranted in these cases to confirm the diagnosis and allow prompt treatment and follow-up with oncology.

## DISCLOSURES

Author contributions: All authors contributed equally to this manuscript. S. Mehta is the article guarantor.

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Informed consent was obtained for this case report.

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