# A Rare Case of Medullary Carcinoma of the Colon with Lymphatic Metastasis

Zainab Shahid DO[1], Charles Yang DO[1], Matthew Everwine DO[2], Punitha Shivaprasad DO[3]

1. Internal Medicine, Jefferson New Jersey
2. Gastroenterology, Jefferson New Jersey
3. Gastroenterology, Virtua

## Introduction

- Medullary carcinoma of the colon, otherwise known as MAC, is a rare cancer
- Encompasses .03% of all colorectal carcinomas
- We present a rare case of MAC occurring in an older adult with strong tobacco use history

## Case Presentation

- 76-year-old female with past medical history of tobacco use disorder, COPD, and known pulmonary nodules presented to ED for nodule surveillance
- ROS positive for chronic shortness of breath and cough
- CT chest revealed enlarging lung nodules and mediastinal adenopathy
- PET scan revealed hypermetabolic 2.5 x 2.5 cm soft tissue mass in the distal ascending colon and hypermetabolic lymph nodes in right upper quadrant
- Colonoscopy revealed an infiltrative 2 cm mass at the hepatic flexure
- Pathology revealed poorly differentiated adenocarcinoma with normal expression of MSH2 and MSH6 and absence of MLH1 and PMS2
- Pathology consistent with medullary carcinoma of the colon
- EUS and biopsy of peripancreatic and porta-hepatis lymph nodes favored metastatic medullary carcinoma
- Patient underwent a right hemicolectomy and follows closely outpatient

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**Medullary carcinoma of the colon are rare and encompass .03% of all colorectal carcinomas**

**Current standard for diagnosis requires distinct microscopic morphology and molecular staining patterns**

**No current treatment guidelines due to rarity**

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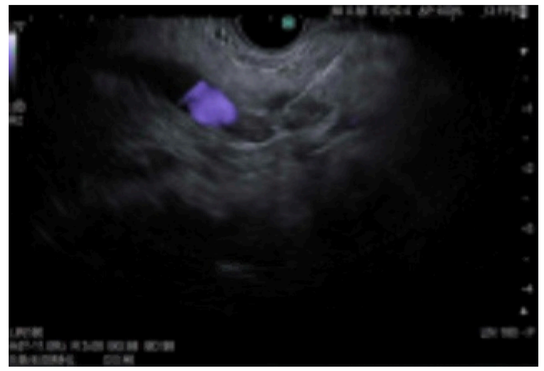
## Discussion

- MAC is a rare cancer associated with a high level of microsatellite instability and deficient mismatch repair proteins
- Large non-gland forming cancer composed of large polygonal eosinophilic cells growing in solid sheets and infiltrated with small lymphocytes
- Majority of reported cases revealed a lack of MLH-1 and PMS2, just as our patient's case
- Express markers not commonly associated with colorectal cancers, such as calretinin, CK7, SATB2, and CDH17
- Previously difficult to differentiate from poorly differentiated adenocarcinomas due to their unique tumor marker expression and histopathology
- Therefore, current standard for diagnosis requires distinct microscopic morphology and molecular staining patterns
- No current treatment guidelines due to the rarity of MAC
- Surgical resection and FOLFOX chemotherapy have been used successfully in some studies
- Further studies are required to determine guidelines for both diagnosis and treatment of this rare disease



Endoscopic Visualization with Final Needle Aspiration of Abnormal Lymph Node