# Metastatic Malignant Pleural Mesothelioma Presenting as Sigmoid Polyps

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## Introduction

Malignant mesothelioma is a rare and aggressive neoplasm that arises from mesothelial cells of serosal cavities such as the pleura and peritoneum.

The diagnosis of malignant mesothelioma is often delayed due to variable and non-specific symptoms, and treatment plans are not well-defined, resulting in poor prognosis. Patients typically have extensive tumor involvement by the time they seek care, and the median survival is approximately 12 months from diagnosis.[1]

We present a rare case of a 60-year-old male with prior history of metastatic malignant pleural mesothelioma with metastases presenting as sigmoid polyps.

## Case Description

A 60-year-old non-smoking male with a history of malignant pleural mesothelioma with liver, peritoneal, and omental carcinomatosis who underwent chemotherapy and radiation therapy presented with a one-month history of abdominal pain.

The patient was previously diagnosed with malignant mesothelioma by liver biopsy (predominantly epithelioid type) and was known BAP-1 mutation positive. He has a family history of lung cancer in his father and mesothelioma in his sister.

His physical examination was remarkable for generalized abdominal tenderness. Blood profile was significant for normocytic anemia. Otherwise, lab findings including urine, and stool analysis were within normal limits. A colonoscopy was performed, and though visualization was limited by suboptimal prep, revealed mucosal edema, and narrowing in the sigmoid colon in addition to one sigmoid polyp that was biopsied.

Previous colonoscopy performed three years prior did not reveal metastatic mesothelioma in the form of colon polyps. The patient died eight months after initial presentation from complications of a perforated viscous.

| Immunohistochemical Stain | Results |
|---|---|
| AE1/AE3 | **Positive** |
| CK7 | **Positive** |
| CK20 | Negative |
| CDX2 | Negative |
| TTF-1 | Negative |
| Napsin A | Negative |
| Calretinin | **Positive** |
| WT-1 | **Positive** |

**Table 1**. Pathology results of mid sigmoid polyp.

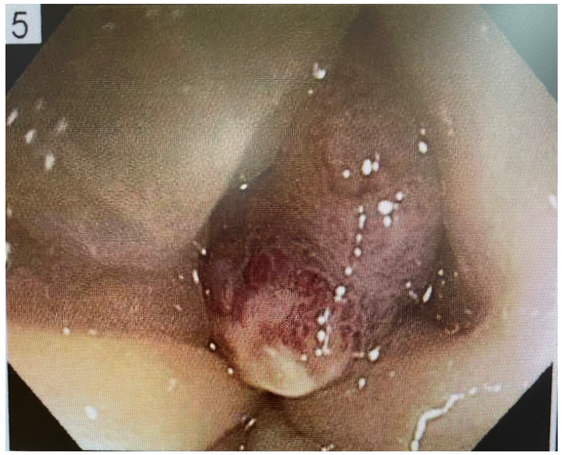


**Figure 1.** Polyp in the mid sigmoid colon.

| Type | Positive Markers | Negative Markers |
|---|---|---|
| **Epithelioid Type** | **Calretinin** | CEA |
| | **WT1** | TTF-1 |
| | Thrombomodulin | Napsin A |
| | Mesothelin | Surfactant apoprotein |
| | D2-40 | Ber EP4 |
| | | MOC31 |
| | | ER |
| **Sarcomatoid Type** | **AE1/AE3** | Myo D1, Myoglobin |
| | CAM5.2 | Desmin, h-calredesmon |
| | | S-100p, KP-1 |

**Table 2**. Antibodies used in the immunohistochemical staining for differential diagnosis.[3]

## Conclusion

Malignant mesothelioma is a rare and insidious malignancy that is associated with poor prognosis due to advanced disease progression at the time of diagnosis. The median survival is approximately 12 months from diagnosis. Though distant metastases of malignant mesothelioma are rare, when involving the abdomen, metastases to the abdominal cavity is more common than to the GI tract.[1,2]

We describe a rare case of metastatic malignant mesothelioma in the form of a sigmoid polyp and demonstrate the importance of clinical history and immunohistochemistry for diagnosis. We conclude metastatic malignant mesothelioma should be considered in the differential diagnosis of tumors of the colon.

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