

Gastric Metastasis of Malignant Leiomyosarcoma

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Introduction

- Metastases in the stomach are rare findings, and likely represent a progressive malignant disease.
- With reported incidence of 0.2%-0.7%, the tumor can spread through hematogenous, lymphatic direct and peritoneal dissemination.
- Gastric metastases of leiomyosarcoma (LMS), a rare malignant mesenchymal smooth muscle tumor, have only been documented in a handful of case reports.
- We present a case of metastatic leiomyosarcoma in the stomach presenting with gastrointestinal bleeding.

Case description

- A 64-year-old male with history of metastatic LMS of his left lower extremity came with melena for 3 days.
- Hemoglobin on presentation was 8.7 g/dl from his baseline of 13-14g/dl.
- He was diagnosed with grade 3 LMS 3 years ago, involving femoral vessel wall and muscle of his left thigh.
- He underwent radical excision without any adjuvant chemo and radiotherapy despite recommendations.
- He subsequently developed metastasis to the lung two years later at which time he started chemotherapy.

Case description

- An esophagogastroduodenoscopy revealed a 6mm mucosal nodule and a 3 cm mass with a clean based ulcer in the body of stomach.
- Biopsy, however, was negative for malignancy.
- He then underwent endoscopic ultrasound guided biopsy for cytology which revealed malignant spindle cell neoplasm in the background of lymphoid tissue consistent with metastatic LMS.

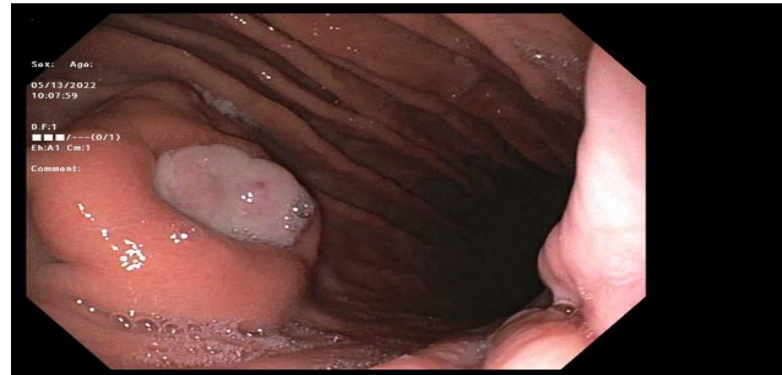


Fig 1 Gastric body mass with central ulceration



Fig 2 Endosonographic appearance of the mass and FNA

Discussion

- LMS, a malignant tumor of smooth muscle origin, represents 20%-30% of soft tissue sarcomas.
- Predominantly uterine in origin, it can arise from the peritoneum, extremities, and blood vessels.
- Primary gastric LMS has also been reported in literature, but they are extremely rare and now are considered a type of gastrointestinal stromal tumor.
- LMS has a rapid tendency to metastasize, with lung, peritoneum, bone, and liver being common targets.
- Some rare cases of LMS metastasizing to pancreas, stomach and oral cavity have been reported.
- In general, metastases to the stomach are uncommon. The most common gastric metastases come from breast, lung, renal cell cancer and malignant melanoma.
- Metastasis of LMS to gastric mucosa has been limited to only a handful of case reports with primary tumors arising from kidney, uterus, and broad ligaments.
- The lesions are described as nodules, submucosal tumors, and ulcerative lesions, most of which are asymptomatic but can present as GI bleeding and abdominal pain.
- These metastases typically portray a poor prognosis. Local excision of the primary lesion with hormonal therapy and chemotherapy is considered standard treatment.