

Introduction :

Approximately 4.2% of patients in the United States will develop colon cancer in their lifetime. When individuals are diagnosed, it is estimated that about 20% of patients will have metastases at diagnosis. Colon cancer most commonly metastasizes to the liver, but it is also known to have spread to lungs, brain, peritoneum, or distant lymph nodes. Even rarer are colorectal cancer spreading to the pancreas as a form of isolated metastases. Isolated pancreatic metastases from non-pancreatic primary tumors are very rare. It is estimated that 2% of all pancreatic neoplasms are from isolated metastases, with the most common originating from renal cell carcinoma. Here, we present a case of a middle-aged man who presented with syncope while getting blood drawn. Further investigations led to the diagnosis of colorectal cancer that has metastasized solely to the pancreas. We present this case to discuss the rarity of isolated metastases.

Case Description:

A 56-year-old male with history of hypertension was admitted for vasovagal syncope after blood drawn at his primary care physician's office. Before the syncopal episode, he reported feeling lightheaded, flushed, and warm. He quickly regained consciousness, denied tongue biting, bowel or bladder incontinence, and frothing at the mouth. No post ictal state was noted. He reported back pain and 30 pounds of unintentional weight loss over the course of three months associated with poor appetite and intermittent epigastric abdominal pain radiating to the back.

Vital signs were normal and physical examination was significant for epigastric tenderness on deep palpation. Routine labs revealed hypercalcemia of 10.3 mg/dl (8.4-10.2 mg/dl). Further workup was done for suspicion of malignancy due to high calcium and significant weight loss. Parathyroid hormone-related protein (PTHrP) was found to be decreased at 10 mg/dl (14-27 mg/dl) while CA 19-9 and CEA were unremarkable.

Computed tomography of the abdomen and pelvis (Figure 1 a & b) revealed two soft tissue masses consistent with neoplasms - a circumferential mass involving the cecum and an upper abdominal mass abutting the distal duodenum and pancreatic head.

Further workup involved a colonoscopy and an endoscopic ultrasound with fine needle aspiration (Figure 2) which revealed cecum adenocarcinoma with isolated metastases to the pancreas. The patient was discharged with pain management and referred to surgical oncologist for outpatient follow up.

Figures:

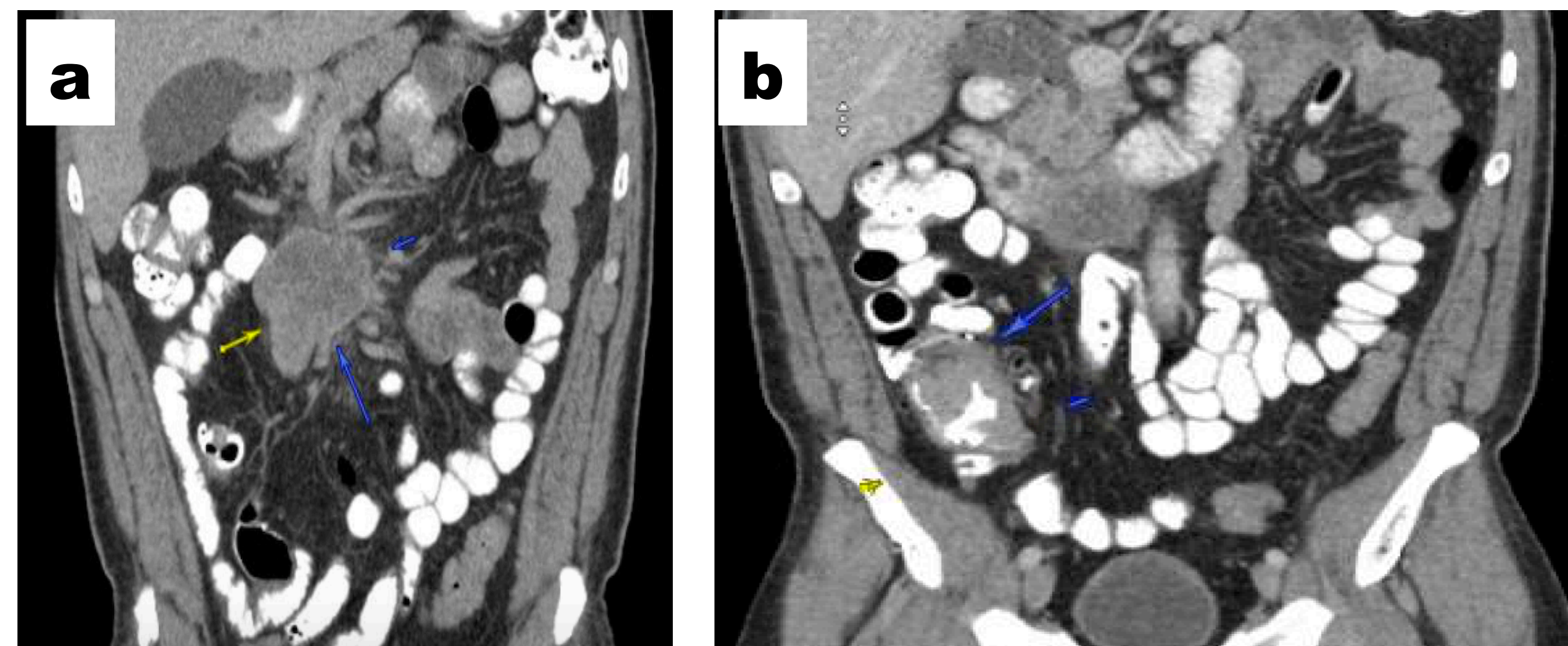


Figure 1: Computed tomography of the abdomen and pelvis showing (a) 5.2 x 4.8 x 5.8 cm lobulated, ring enhancing lesion with adjacent fat stranding and (b) 5.1 cm circumferential, soft tissue mass involving of the cecum.

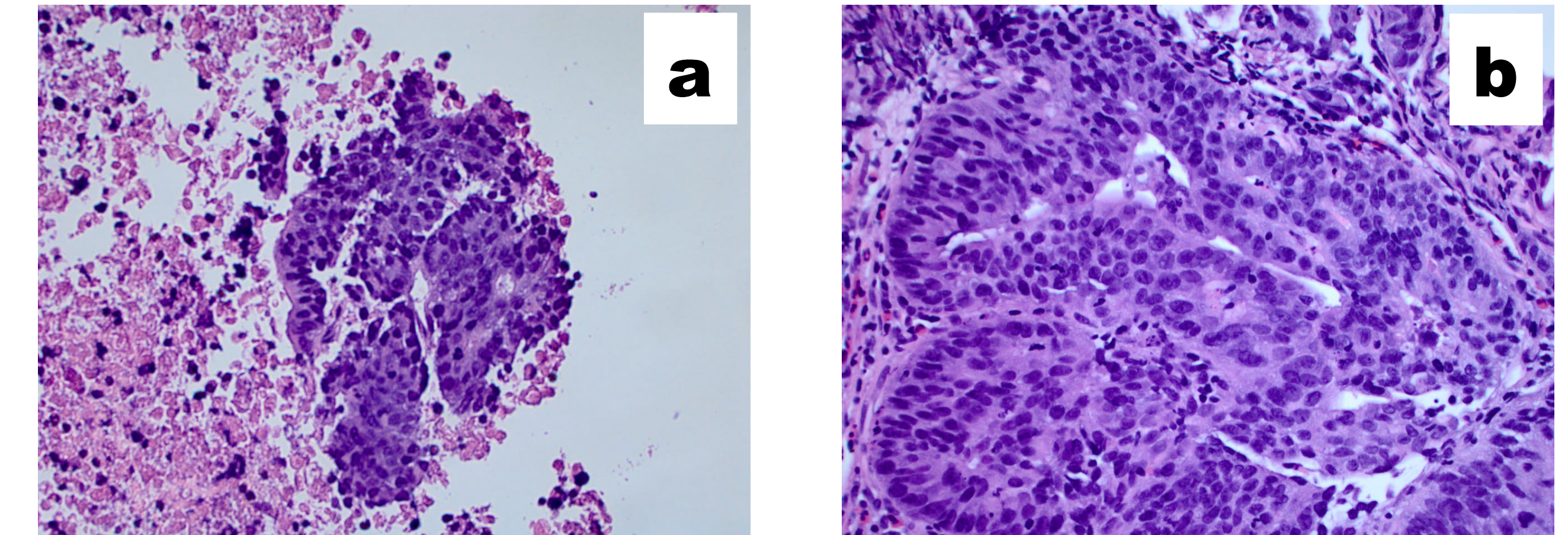


Figure 2: Fine needle aspiration of (a) cecum showing poorly differentiated adenocarcinoma with extensive necrosis and (b) colonic tissue with forms of well differentiated adenocarcinoma (40X, H&E stain).

Discussion:

Synchronous metastatic pancreatic lesions are exceptionally rare. Only 25 cases of isolated colorectal pancreatic metastasis amenable to resection have been reported, 11 of those in the distal pancreas.

Approximately 2% of pancreatic masses are metastases from other primary sites. Common metastatic sites for colon adenocarcinoma include liver, lung, peritoneum, bone, brain, and less commonly adrenals, testicles, and skin. The pancreas is also a recognized site for colon cancer metastasis.

Studies suggest that long term survival is associated with resection in selected patients but these outcomes must be weighed against the significant morbidity that is associated with pancreatic resection.

References:

1. Lee, C.-W., Wu, R.-C., Hsu, J.-T., Yeh, C.-N., Yeh, T.-S., Hwang, T.-L., ... Chen, M.-F. (2010). Isolated pancreatic metastasis from rectal cancer: a case report and review of literature. *World Journal of Surgical Oncology*, 8, 26. <http://doi.org/10.1186/1477-7819-8-26>
2. Untch, Brian R., and Peter J Allen. "Pancreatic Metastasectomy: The Memorial Sloan-Kettering Experience and a Review of the Literature." *Journal of Surgical Oncology*, vol. 109, no. 1, July 2013, pp. 28–30., doi:10.1002/jso.23460.