

Metastatic malignant fibrous histiocytoma to sigmoid colon presenting as a huge abdominopelvic mass on combined positron emission tomography/computed tomography

PET/BT'de malign fibröz histiositomanın büyük abdominopelvik kitle olarak saptanan sigmoid kolon metastazı

To the Editor,

Involvement of the gastrointestinal (GI) tract by malignant fibrous histiocytoma (MFH) as a metastatic site is rare (1-3). We present herein a case of

MFH metastasizing to the sigmoid colon (SC), which is an extremely rare metastatic location for this tumor, with synchronous local recurrent mas-

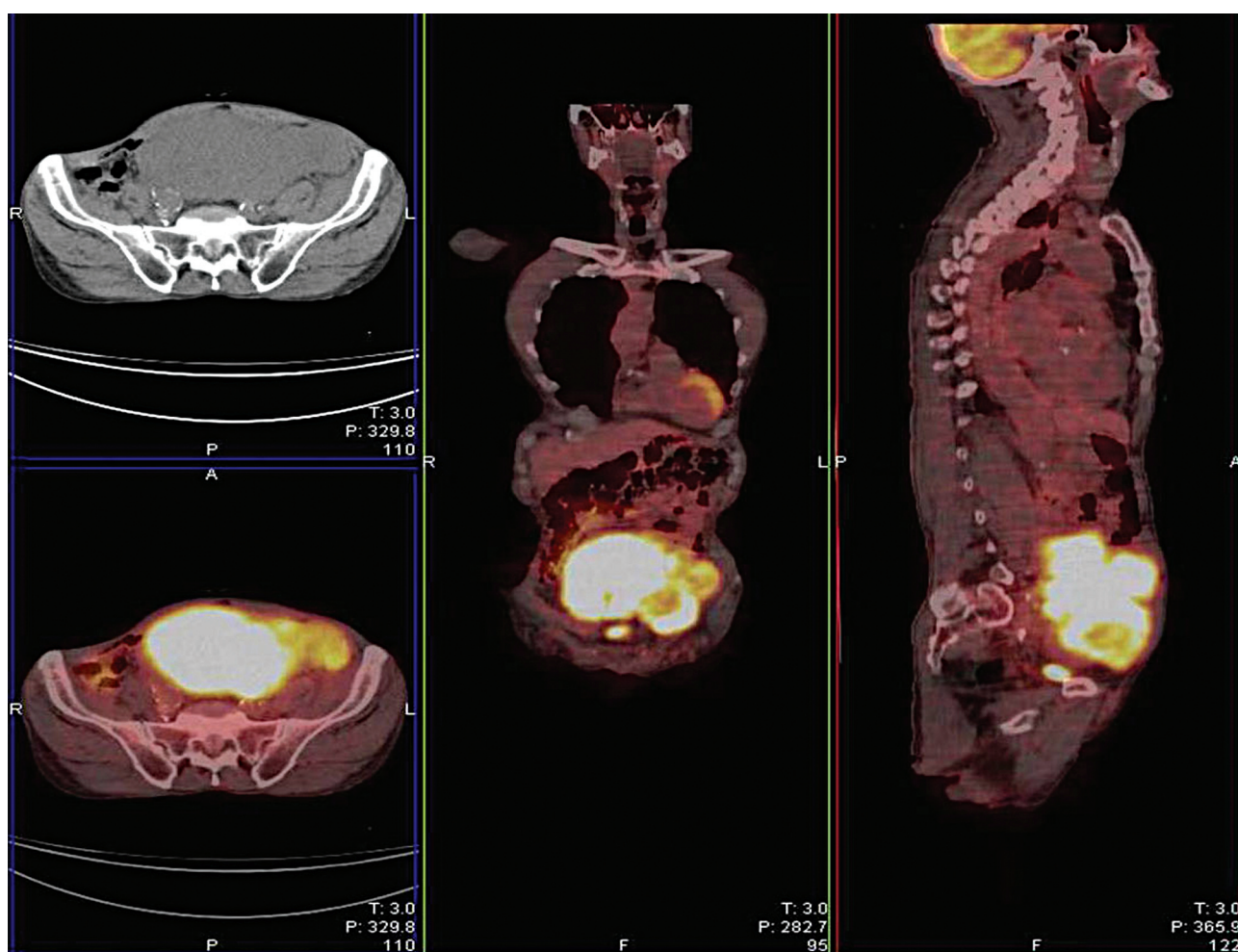


Figure 1. Axial CT and 3D 18F-FDG PET/CT images demonstrate areas of pathologic metabolic uptake in huge pelvic mass highly suspicious for malignancy.

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ses on the left thigh detected by fluorine-18-fluorodeoxyglucose (18F-FDG) positron emission tomography/computed tomography (PET/CT). A 71-year-old man suffering from recurrent MFH of the left thigh for approximately two years was admitted to the hospital with abdominal pain and constipation of seven days' duration. Abdominal ultrasonography revealed a large, irregularly shaped mass with a solid component in the abdominopelvic region. Whole body PET/CT was performed in a search for further distant metastases. PET/CT images showed a huge abdominopelvic mass showing intense hypermetabolism (Figure 1) as well as a number of hypermetabolic muscular nodules in the left thigh (Figure 2). No lesions were seen in the lungs, bone or other parts of the body on either PET or combined non-contrast CT. The lesions were highly suggestive of recurrent and metastatic masses of MFH, and the patient underwent surgery. The lesions in the left thigh were resected and the huge mass, which contained the mesentery of the SC, was removed with a subtotal colec-

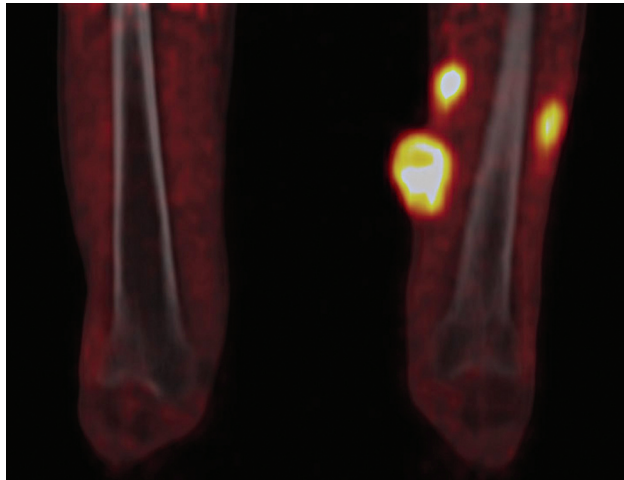


Figure 2. Coronal images of 18F-FDG PET/CT showing hypermetabolic intramuscular nodular lesions in the left thigh located at the level of the previous surgical scar, suggesting recurrence.

tomy. The lesions were confirmed as MFH on histopathological examination.

Malignant fibrous histiocytoma (MFH) is an aggressive type of soft tissue sarcoma characterized by a high rate of local recurrence or metastases (4). The lung is the first metastatic site in more than 90% of cases (5). Other sites include bone, liver, regional lymph nodes, and retroperitoneum (6). We here encountered a rare and unusual metastatic pattern of MFH with the involvement of the mesentery of the SC without any other organ or macroscopic lymph node metastases on PET/CT. To the authors' knowledge, this is the first report of MFH metastatic to the SC detected by PET/CT. In a series of three cases with metastatic MFH of the GI tract, the involved sites were reported as small bowel, left colon and rectum (2). Unlike our case, multiple further organ metastases were diagnosed before or concurrent to GI metastases in all patients with conventional imaging methods (2). In another case report consisting of nine patients, the small intestine was detected as the most frequently involved part of the GI tract from metastatic MFH (3).

Positron emission tomography/computed tomography (PET/CT) is a new standard in oncology, which has already been shown to benefit the management of several cancers, providing excellent functional information as well as anatomical details (5). However, only a small number of data on MFH have been published, in a few case reports, in which PET/CT was mainly utilized (5,7).

The present case demonstrates not only an extremely rare and unusual metastatic pattern of MFH, but also its local recurrence by PET/CT. Being the most precise image fusion with a high sensitivity, PET/CT may accurately evaluate recurrent and metastatic disease and may substantially contribute to the restaging and clinical management of MFH patients.

REFERENCES

1. Yarze JC, D'Agostino JA. Metastatic malignant fibrous histiocytoma to the duodenum. *Dig Dis Sci* 2008; 53: 2808-9.
2. Agaimy A, Gaumann A, Schroeder J, et al. Primary and metastatic high-grade pleomorphic sarcoma/malignant fibrous histiocytoma of the gastrointestinal tract: an approach to the differential diagnosis in a series of five cases with emphasis on myofibroblastic differentiation. *Virchows Arch* 2007; 451: 949-57.
3. Kanoh T, Shirai Y, Wakai T, Hatakeyama K. Malignant fibrous histiocytoma metastases to the small intestine and colon presenting as an intussusception. *Am J Gastroenterol* 1998; 93: 2594-5.
4. Anagnostopoulos G, Sakorafas GH, Grigoriadis K, Kostopoulos P. Malignant fibrous histiocytoma of the liver: a case report and review of the literature. *Mt Sinai J Med* 2005; 72: 50-2.

5. Kobayashi E, Kawai A, Seki K, et al. Bilateral adrenal gland metastasis from malignant fibrous histiocytoma: value of [F-18]FDG PET-CT for diagnosis of occult metastases. *Ann Nucl Med* 2006; 20: 695-8.
6. Lucas JD, O'Doherty MJ, Cronin BF, et al. Prospective evaluation of soft tissue masses and sarcomas using fluorodeoxyglucose positron emission tomography. *Br J Surg* 1999; 86: 550-6.
7. Bucerius J, Buchholz B, Strunk H, et al. Avoidance of invasive diagnostic and harmful therapeutic measures in a patient with malignant fibrous histiocytoma and extensive clinically occult metastases. *J Natl Med Assoc* 2009; 101: 953-5.

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Low rectal mass diagnosed as a cap polyp

Şapka polibi tanısı alan rektal kitle vakası

To the Editor,

Cap polyposis is a rare disease, reported occasionally in case series. We report here a case of a mass-forming low rectal lesion diagnosed as a cap polyp, which resolved spontaneously after the lesion was partially removed by snare. This type of case has not been reported previously.

A 31-year-old man was admitted to our hospital with a history of frequent mucous and bloody diarrhea (>10 times/day) and tenesmus that had persisted for six months. He had no significant medical or sexual history, and was not taking any medications. Laboratory tests including stool exam disclosed no abnormalities. Colonoscopy revealed multiple (>10) reddened and eroded sessile polyps with nonspecific intervening mucosa, which were consistent with the features of cap polyps, in the distal sigmoid colon (Figure 1). On a retroflexed view of the rectum, a large mass of more than 4 cm immediately above the dentate line was also observed, and the characteristics seemed similar to those of the one in the sigmoid colon. A partial endoscopic resection with hot snare was attempted for accurate diagnosis and treatment. On

the histological examination of the mass, the patient was diagnosed as cap polyp without malignant cells (Figure 2).

After resection, the main symptoms improved dramatically. A year later, colonoscopy demonstrated

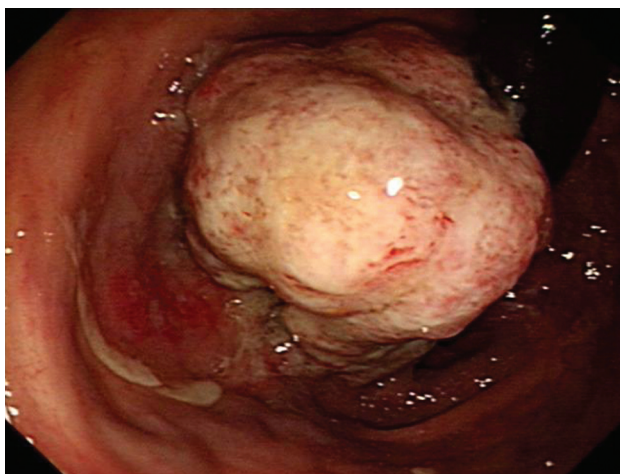


Figure 1. Colonoscopic view of cap polyps in sigmoid colon and around the anus shows a large mass with coarse surface and copious exudates before.

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