Figure 1. A. Endoscopic appearance of the foreign body in the rectum. **B.** The foreign body extracted from the rectum.

In conclusion, patients should be informed about all of the procedures that are planned with therapeutic intent, such as obtaining vascular access, intravenous/intramuscular injection(s), rectal drug administration and procedures must be applied carefully by qualified staff.

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Metastasis of rectal cancer to soft tissue of the hand: An unusual case

Rektal kanserin el yumuşak dokusuna metastazı: Nadir bir olgu

To the Editor,

Hand metastases occur infrequently, and metastatic tumors in the soft tissue of the hand caused by rectal cancer are extremely rare. We report a rare case of a metastatic tumor in the soft tissue of

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the hand from rectal cancer. A 53-year-old white male was diagnosed with rectal cancer by colonoscopic biopsies in February 2009. He was initially treated with surgery and continuous infusion of 5-fluorouracil (FU) during external beam radiation therapy. The tumor load was low without measurable disease until June 2009, when a lump appeared in the thenar portion of his right hand. A magnetic resonance imaging (MRI) study of the right hand (Figure 1), performed before and after administration of gadolinium, showed a soft-tissue mass of 4.2 x 5.5 x 6.1 cm in the thenar eminence. The mass showed heterogeneous signal intensity on T2-weighted images, and enhanced after gadolinium administration. Partial resection of the lesion was performed under local anesthesia, and the pathological examination showed a well-differentiated adenocarcinoma similar to the primary rectal carcinoma. Microscopy and immunocytochemistry findings confirmed the diagnosis of metastasis from the rectal adenocarcinoma.

Metastasis to the skeletal muscles is very rare and represents less than 1% of all hematogenous metastases from solid tumors (1,2). The most frequent skeletal muscle metastases occur in the diaphragm, rectus muscle of the abdomen, deltoid, psoas and thigh muscles, intercostals, gluteus, and spinal muscles (3). Skeletal muscles account for approximately 43% to 50% of the body mass (4). Vascular embolization is a common dissemination pathway for tumor metastasis, and skeletal muscles are well vascularized, receiving a large portion of total cardiac output. Therefore, it is unclear why muscle metastases are extremely rare. Muscular contraction and blood turbulence may create a hostile environment for the circulating tumor cells (5,6). The high concentration of lactic acid may also suppress the growth of tumor cells. Some studies suggest that muscles possess proteases and other inhibitors, which can block tumor invasion and development (7).

Figure 1. MRI of hand metastasis from adenocarcinoma of rectal cancer.

The differential diagnosis of skeletal muscle metastases includes benign tumors, such as lipomas, angiomas, chondromas, osteomas, and myositis ossificans, or primary soft tissue sarcomas, such as synovial sarcomas, liposarcomas, extraosseous osteosarcomas, and chondrosarcomas. The prognosis associated with skeletal metastases and soft tissue metastasis is poor, consistent with the fact that it represents systemic disease. Treatment options, depending on the clinical setting, include observation, radiotherapy, chemotherapy, and excision. This information is important in understanding how malignant tumors spread in the hand, and it might influence the management of such tumors.

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