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Solitary fibrous tumor of the lesser omentum: Report of a rare case

Küçük omentumun soliter fibröz tümörü; Az görülen bir olgu sunumu

Yahya EKİCİ[1], Şaban UYSAL[1], Gülnur GÜVEN[2], Gökhan MORAY[1]

Department of [1]General Surgery, [2]Pathology, Başkent University, School of Medicine, Ankara

We herein describe the case of a 51-year-old male who presented with a mass of the epigastric region. Preoperative contrast enhanced abdominal computerized tomography revealed a solid mass between the left liver lobe and stomach. Histopathologic examination diagnosed the mass as a solitary fibrous tumor. Although solitary fibrous tumors are rare, especially in the abdomen of adults, they are generally benign, but malignant cases have also been reported. Long-term follow-up will be necessary to determine whether the surgery has been curative.

Key words: Solitary fibrous tumor, abdomen, lesser omentum

Bu olguda karnında kitle ile başvuran 51 yaşında erkek hasta sunulmaktadır. Preoperatif dönemde yapılan kontrastlı karın bilgisayarlı tomografisinde karaciğer sol lobu ile mide arasında solid kitle görülmüştür. Histopatolojik incelemede kitlenin Soliter fibröz bir tümör olduğu ortaya çıkmıştır. Soliter fibröz tümörler yetişkinlerde karında nadir görülür ve genellikle benign olmalarına rağmen malign vakalar da bildirilmiştir. Bu vakalarda uzun dönemli takip cerrahinin yeterliliğini belirlemede gereklidir.

Anahtar kelimeler: Soliter fibröz tümör, karın, küçük omentum

INTRODUCTION

Solitary fibrous tumors (SFTs) are rare neoplasms of submesothelial origin, and the tumor was first described in the pleural cavity. This tumor has also been seen in extrapleural sites, including the lung, pericardium, peritoneum, soft tissue, gastric serosa, intraspinal space, and retroperitoneal space. SFT of the peritoneum, especially arising in the lesser omentum, is extremely rare. SFTs are regarded as benign, but histological or clinical malignant cases have been reported (1).

Solitary fibrous tumor (SFT) of the lesser omentum is rare, and this rarity may account for the paucity of information about its clinical behavior.

We report an unusual case of lesser omentum SFT.

CASE REPORT

A 56-year-old male was referred to us due to an intraabdominal mass lesion in the epigastric region. Recently, he had begun to experience epigastric pain, abdominal fullness and vomiting episodes especially after heavy meals. His family and medical history were unremarkable. He had no history of previous abdominal surgery. On physical examination, a hard, non-tender mass was palpated deeply in the epigastric region. Auscultation of the abdomen revealed normal bowel sounds. Laboratory data including tumor markers were within normal limits. Contrast enhanced abdominal computed tomography (CT) showed an 11.5x8.5x7.5 cm solid intraperitoneal mass between the left lobe of the liver and stomach with sharp margins with heterogeneous contrast enhancement. The left liver lobe became atrophic due to the compressing effect of the lesion (Figure 1).

At laparotomy, an encapsulated well-defined tumor with hard consistency was found in the lesser omentum. The tumor was not adhered to the wall of the stomach, liver parenchyma or adjacent structures. With careful dissection, the tumor was resected completely without resection of the stomach or liver parenchyma. The specimen consisted

Address for correspondence: Yahya EKİCİ
Başkent Üniversitesi Hastanesi
Genel Cerrahi Polikliniği, M. Fevzi Çakmak Cad. %. Sokak No: 48
06490 Bahçelievler, Ankara, Turkey
Phone: + 90 312 212 29 12 • Fax: + 90 312 215 26 29
E-mail: dryahyaekici@gmail.com

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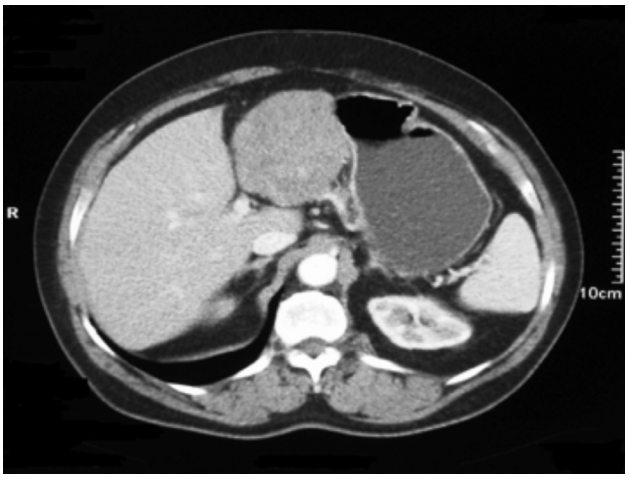

Figure 1. The close relationship of the mass with the liver and stomach.

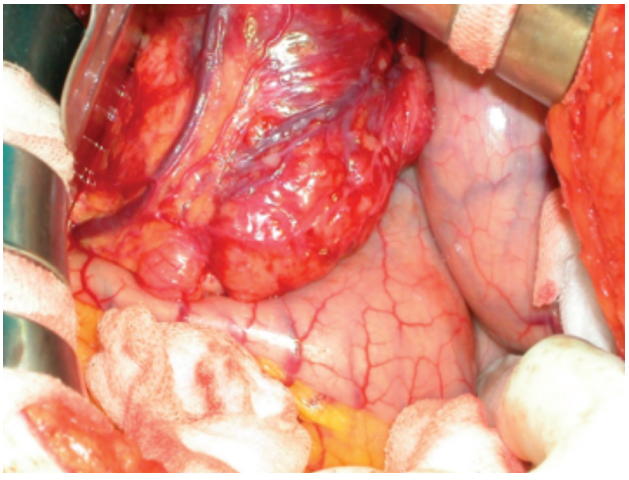

Figure 2. Intraoperative view of the mass.

of one piece of solid tumor measuring approximately 12x7x5 cm. Macroscopically, it was yellowish brown in color and hard in consistency (Figure 2).

Microscopically, the tumor had a fibrous capsule with myxoid stromal changes. The tumor had moderate cellularity with spots of hemorrhages. The tumoral cells were spindle-shaped with no mitotic activity or atypias and showed very low proliferation index with Ki 67 (< 1%). They showed immunohistochemical positivity for CD 34 and negativity for c-kit (CD117), actin and S–100. The final diagnosis was SFT of the lesser omentum (Figures 3 A, B).

DISCUSSION

Tumors and tumor-like lesions of the lesser omentum are rare, and accurate diagnosis is difficult. These lesions are similar to those of primary and metastatic malignancies, inflammatory processes from the adjacent organs and hematomas. Mesenteric fibromatosis, sclerosing mesenteritis, inflammatory pseudotumor, and extrapleural SFTs are distinct diseases; their overlapping radiological and pathological features allow them to be grouped together when their anatomic site of origin is a mesenteric structure (2).

Solitary fibrous tumors (SFTs) have been reported in various extrapleural sites, including the abdomen. Extrapleural SFTs have been reported to occur slightly more frequently in men than women, and the mean age of patients at presentation is 54 years

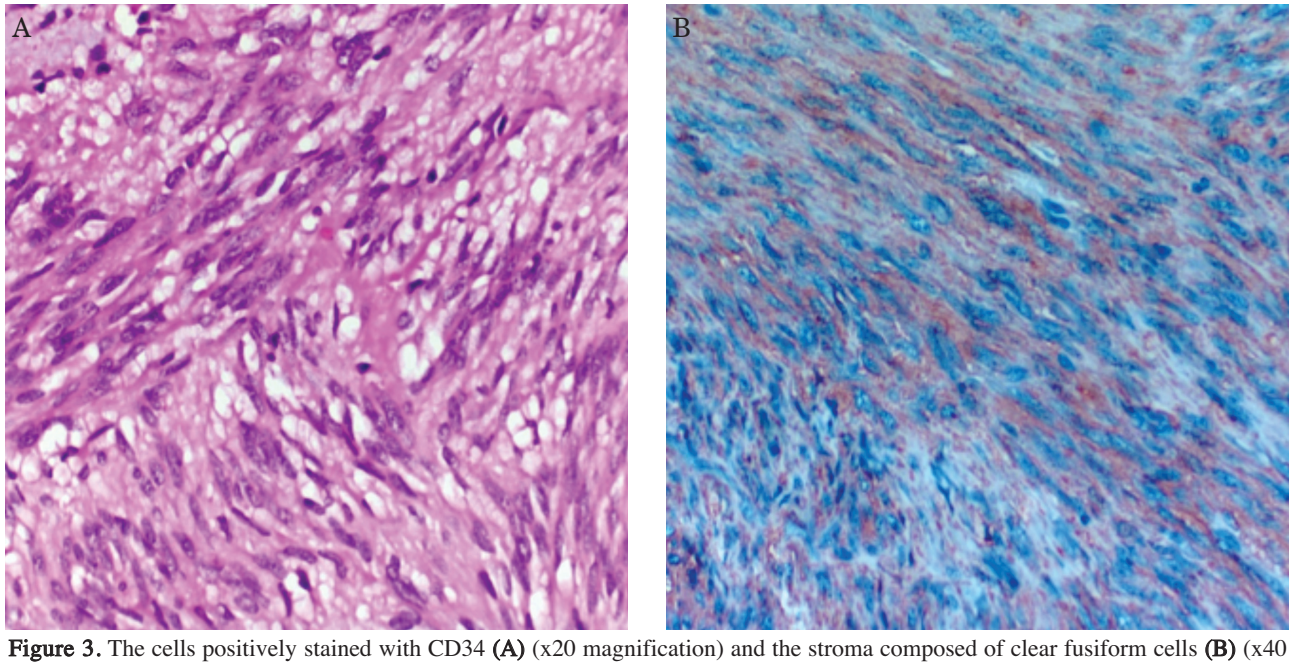

Figure 3. The cells positively stained with CD34 **(A)** (x20 magnification) and the stroma composed of clear fusiform cells **(B)** (x40 magnification).

(3, 4). The clinical manifestations of SFTs are generally related to the size and location of the lesion.

At gross examination, an extrapleural SFT has a well-circumscribed fibrous capsule containing a firm yellowish brown mass (3, 4). At histologic analysis, an intact layer of mesothelium overlying the tumor is characteristically present. Spindle-shaped cells resembling fibroblasts and a variable amount of hyalinized collagen compose the tumor (3,4). These cells may have a storiform, fascicular or myxoid pattern of growth (3, 4). SFTs are characterized by strong positivity for CD34.

Complete surgical resection is the only method of curative management. SFTs are usually known as benign; however, SFTs can recur and metastasize after surgical resection. Vallat-Decouvelaere et al. (5) reported that histology of primary extrapleural SFTs did not predict recurrence and metastasis. Poor prognostic markers of SFTs include positive surgical margins, tumor size >10 cm and mitotic activity of 10 mitosis/10 high-power fields.

In this case, although the tumor was >10 cm and symptomatic, tumor cells showed neither mitotic activity nor nuclear atypia, and the patient is still disease-free 10 months after complete excisional surgery. However, long-term follow-up will be necessary to determine whether or not the surgery has been curative.

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