



Anterior abdominal wall intermuscular giant lipoma

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Dear Editor,

Lipoma is the most frequent benign tumor of the soft tissue. It may be either superficial or deep tissue, with the previous being more common [1]. Solitary lipoma occurs at the same rate in males and females [2]. They can be found anywhere in the body with approximately 15–20% located in the head and neck area and the majority of the rest in the shoulder, back and other fields. Even though soft tissue lipomas are common tumors, a large lipoma arising from the intermuscular deep layers of the abdominal wall would appear to be very rare [3].

A 60-year-old woman underwent hysterectomy and bilateral oophorectomy due to endometrial cancer 2 years ago. An abdominal computed tomography (CT) scan for routine control showed a mass of fat density in the muscle layers of the right abdominal wall (Figure 1 and 2). The lesion was diffuse and homogeneous, measuring 10x4x6 cm. Because the lesion was well defined, smooth, and entirely composed of fatty tissue it was evaluated as a lipoma. No evidence of invasion to the intra-abdominal region was noted. She refused surgery for the mass as there was no cosmetic problem for

her. She was followed-up at the outpatient clinic and is not experiencing any problem due to this abdominal wall mass.

Clinical diagnosis of abdominal wall lipoma has been confused with abscess, endometrioma, hematomas, sebaceous cyst, suture granuloma, inguinal or incisional hernia, desmoid tumor, sarcoma, lymphoma, leiomyoma, or primary and metastatic cancer [3,4]. Ultrasonography, CT scan, and magnetic resonance imaging are helpful noninvasive techniques when the differential diagnoses are numerous or more information about a known lipoma is needed [5]. However, CT scan in the diagnosis of these tumors can also provide useful information and play an important role in assessing soft tissue masses such as lipoma, desmoid tumor, hematomas, and endometrioma. Benign lipomas have a homogeneous low attenuation on CT [1,3]. On CT, fat has low attenuation, that is, less than -20 Hounsfield units (HU) and typically between -65 and -120 HU [1]. For our patient, the lesion was calculated to be -90 HU in CT. There was no infiltration of the mass into surrounding musculature, nor were enhancements or thick septations revealed within the mass through CT imaging.

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Figure 1. Axial CT image of the right lower quadrant shows a large, sharply defined fatty lesion with smooth and well-circumscribed margins within the intermuscular field of the abdominal wall (white arrows).



Figure 2. A sagittal CT showed a large, well-defined fatty lesion with smooth margins between external and internal oblique muscles in the abdominal wall (white arrows).

Deep lipomas that are either intermuscular or intramuscular have been described as infiltrating lipomas by Terzioglu et al. [6] Our case described a deep, unusually large intermuscular lipoma located between the external oblique and internal oblique muscle of the right

lower abdominal wall without invasion. Terzioglu et al. describe lipomas of $10.0 \times 5.0 \times 3.0$ cm or greater as giant lipomas [6]. In our case, with a size of $10 \times 4 \times 6$ cm the mass was evaluated as a giant lipoma. The majority of lipomas keep a stable volume or slowly increase in size, remaining painless and asymptomatic masses that seldom invade the surrounding structures.

Treatment of the intermuscular deep lipoma in this case required complete excision. Indications for excision include a mass greater than 5 cm in size; a subfascial location; a tumor that is growing; clinical features such as pain, rigidity, or irregularity. Another reason for excision includes a patient's cosmetic concern [7].

Conflict of interest statement

The authors have no conflicts of interest to declare.

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