

## Dev mezenterik iyi diferansiye liposarkoma bağlı ölüm: Olgu sunumu

### Death related to huge mesenteric atypic lipomatous tumor/ well differentiated liposarcoma: Case Report

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#### ÖZET

Liposarkomlar yetişkinlikte görülen en sık mezenterik tümörler olmasına rağmen, primer mezenterik liposarkomlar oldukça nadirdir ve lokalizasyon, iyi diferansiye liposarkomlarda en önemli prognostik faktördür. Mezenter liposarkomlar için nadir bir lokalizasyondur.

Ayakta şişlik şikayeti olan 50 yaşında erkek tetkikler devam ederken evinde rahatsızlandığı ve hastaneye götürülürken öldüğü belirtilmiştir. Otopsisinde, karın boşluğunda büyük mezenterik bir kitle saptanmıştır. Kitlenin kesit yüzü sarı-beyaz renkli, solid ve balık eti kıvamında olup düzensiz sınırlı, yama şeklinde sarı renkli nekrotik ve hemorajik alanlar içermektedir.

Bu olgu 12000 gram ağırlığında büyük bir kitle ve nadir bir lokalizasyonda olmasından dolayı ilginç bulunarak mezenterik atypic lipomatous tumor/iyi diferansiye liposarkoma (ALT/IDL) bağlı ölüm olarak sunulmuştur.

**Anahtar Kelimeler:** Liposarkom, mezenterik tümör, mezenter.

#### ABSTRACT

Although liposarcomas are one of the most common mesenchymal tumors of adulthood, primary mesenteric liposarcomas are very rare and localization is the most important prognostic factor of atypic lipomatous tumor/well differentiated liposarcomas. Mesentery is a rare localization for liposarcomas.

A case of a 50 years old man with swelling of leg is reported in this paper. During the investigation, his health condition got worse at home and died while being transferred to hospital. At autopsy; there were huge mesenteric mass in the abdominal cavity. Cut surface of mass was deep yellow to ivory in color, solid and fish-meat consistency and contain patches of yellow irregular necrotic and hemorrhagic areas.

In this case, we report a death related with rare huge mesenteric atypic lipomatous tumor/well differentiated liposarcoma which is 12000 g in weight.

**Keywords:** Liposarcoma, mesenchymal tumor, mesentery.

## INTRODUCTION

Although liposarcomas are one of most common mesenchymal tumors of adulthood, primary mesenteric liposarcomas are very rare (1,7). They usually originate from soft tissues of extremities and retroperitoneum (3,5). According to WHO classification, liposarcomas are divided into four subtypes: Atypic lipomatous tumor/well differentiated liposarcoma (ALT/WDL), dedifferentiated, myxoid/round cell, and

pleomorphic subtype (3). Adipocytic tumors of mesentery are usually atypic lipomatous tumor/well-differentiated liposarcoma (ALT/WDL) type and secondary degeneration such as myxoid and inflammatory changes can be seen occasionally (8). They enlarge slowly until present with clinical symptoms related with large dimensions of tumor or compression of adjacent organs. Although liposarcomas are the most common tumors in retroperitoneum, mesentery is a rare localization. Tumor mortality is closely related

to localization in atypic lipomatous tumor/well-differentiated liposarcoma (ALT/WDL). In atypic lipomatous tumors/well-differentiated liposarcomas (ALT/WDL), mortality has been reported to be 0% in extremities and 33% in retroperitoneum, total mortality is reported as 11% (3,9).

## CASE REPORT

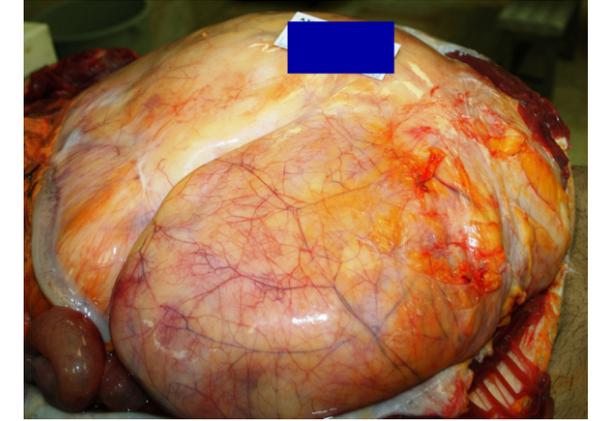
Our case is 50 years old man who was admitted to the hospital with swelling of leg complaint. At the examination of patient, a mass was detected in abdomen. During the investigation of the mass, it's emphasized that his health condition got worse at home and died while being transferred to hospital.

In autopsy, there was a mass lobulated in abdominal cavity with a thin capsule partially, weighed 12000 g and measured 45x35x30 cm in dimensions (Fig.1-2). Cut surface of the mass was deep yellow to ivory in color, solid and fish-meat consistency and contains patches of yellow irregular necrotic and hemorrhagic areas (Fig. 3). Also fibrin thrombosis were seen in deep calf veins.

In the histopathologic examination of the tumor, there were patches of fatty necrosis in mature adipose tissue and scattered spindle shaped atypic stromal cells with irregular shaped hyperchromatic nucleus were seen (Fig. 4-5). Also, there were fibrin thrombosis in the sections taken from deep calf veins.

## DISCUSSION

Atypic lipomatous tumors/well differentiated liposarcomas (ALT/WDL) because of comprising 30-40% of all liposarcomas, are the biggest subgroup of malign adipocyte cell neoplasms (3,7,10). They are seen usually in middle age adults. Men and women are equally affected (3,5,11). Well differentiated liposarcomas are



**Figure 1.** Macroscopic view of huge abdominal mass.

local aggressive intermediate malign mesenchymal tumors that are composed of entirely or partially mature adipocyte proliferation. Adipocytes and stromal cells show focal nuclear atypia. Scattered hyperchromatic and frequent multinuclear stromal cells, variable amounts of lipoblasts with mono or multivacuoles are useful in morphological diagnosis.

Atypic lipomatous tumors/well differentiated liposarcomas (ALT/WDL) do not metastasize unless it becomes de-differentiated but local recurrences are unavoidable in localizations such as retroperitoneum and mediastinum. Wide excisions cannot be made and usually lead to



**Figure 2.** Huge lobulated mass from mesentery.

death without de-differentiation and metastasis. Dedifferentiated liposarcomas are more aggressive than well differentiated liposarcomas. Local recurrences, metastasis, and disease dependent mortality have been reported 41%, 17%, 28%, respectively (5).

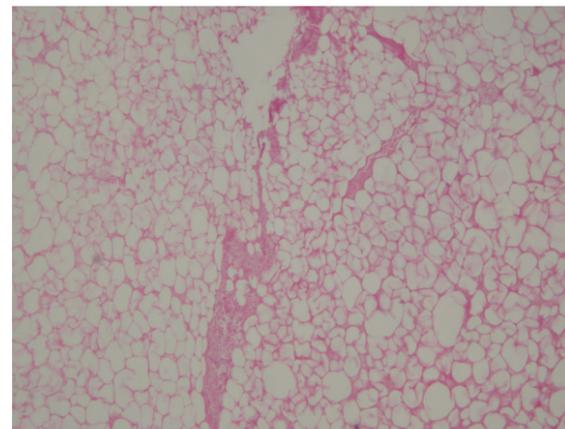
Histopathologically, atypic lipomatous tumors/well differentiated liposarcomas (ALT/WDL) are divided into 3 subtypes: Adipocytic (lipoma-like), sclerosing, and inflammatory (3). Microscopically, they are usually composed of mature adipocytic cells that show marked differences in cell size. Usually hyperchromatic and multinucleated stromal cells are seen together with focal nuclear atypia and hyperchromasia in adipocytes. Mono or multivacuolated lipoblasts can be found in varying amounts. Lipoblasts had previously been considered the main diagnostic clue in favor of a diagnosis of liposarcoma; however, presence of lipoblasts is neither necessary nor diagnostic for liposarcoma (10,11). Variation in adipocytic size and cytological atypia are the main diagnostic clues and presence of microscopic fat necrosis as well as fat atrophy is common pitfall in diagnosis (10).

The most important prognostic factor as well as predictor of relapse is anatomical localization for atypic lipomatous tumors/well differentiated liposarcomas (ALT/WDL). Deeply localized tumors have tendency to recur, and lead to death depending on local effects or de-differentiation and metastasis. Mortality has been increased from 0%[extremities] to %80 [retroperitoneum] during 10-20 years follow-up. Mean death time is between 6-11 years after diagnosis (9,12).

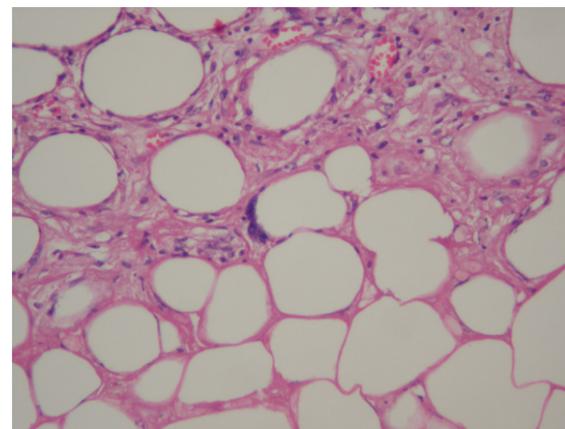
In this case, we report a death related to a huge mesenteric atypic lipomatous tumor/well differentiated liposarcoma (ALT/WDL) which is rarely localized in mesentery. This case has called for clinical attention with leg swelling due to thrombosis in the deep calf veins rather than symptoms related with mass effect.



**Figure 3.** Macroscopic view of yellow necrotic areas of fish meat consistency mass from mesentery.



**Figure 4.** Necrosis in the adipocytes. (H&E x100)



**Figure 5.** Atypic stromal cells with hyperchromatic irregular nucleus in the atypic lipomatous tumor/well differentiated liposarcoma.(H&E x400)

## REFERENCES

- Jukić, Z, Brcić, I, Zovak, M, Vucić, M, Mijić, A, Kruslin, B. Giant mixed-type liposarcoma of the mesentery: case report. *Acta Clin Croat* 2012;51: 97-101.
- Gupta, R, Sharma, A, Arora, R, Kulkarni, MP, Chattopadhyaya, TK, Singh, MK. Well-differentiated mesenteric liposarcoma with osseous metaplasia: a potential diagnostic dilemma for the pathologist. *J Gastrointest Cancer* 2010;41:79-83.
- Goldblum JR, Folpe AL, Weiss SW. Liposarcoma. In: Goldblum JR, Folpe AL, Weiss SW, editors. *Enzinger and Weiss's Soft Tissue Tumors*. 6th ed. Philadelphia:Elsevier Saunders;2014. pp. 484-523.
- Khan, N, Afroz, N, Fatima, U, Raza, MH, Rab, AZ. Giant primary mesenteric liposarcoma: a rare case report. *Indian J Pathol Microbiol* 2007;50: 787-9.
- Calò, PG, Farris, S, Tatti, A, Tuveri, M, Catani, G, Nicolosi, A. Primary mesenteric liposarcoma. Report of a case. *G Chir* 2007;28: 318-20.
- Khan MI, Zafar A, Younas M, Malik I. Huge mesenteric liposarcoma. *J of Pakistan Medical Association*:2013;63:775-7.
- Coindre JM, Pedeutour F, Aurias A. Well-differentiated and dedifferentiated liposarcomas. *Virchows Archiv* 2010;456(2):167-79.
- V.J.Desmet, Juan Rosai. Peritoneum, retroperitoneum, and related structure. In: Rosai J, editor. *Rosai and Ackerman's Surgical Pathology*. 10 th ed. Elsevier; 2011. pp. 2233-70.
- Weiss SW, Rao VK. Well-differentiated liposarcoma (atypical lipoma) of deep soft tissue of the extremities, retroperitoneum, and miscellaneous sites. A follow-up study of 92 cases with analysis of the incidence of "dedifferentiation". *Am J Surg Pathol* 1992;16: 1051-8.
- Licia Laurino and Angelo Paolo Dei Tos. Adipocytic Tumors. In: Hornick JL, editor. *Practical soft tissue pathology*, Philadelphia:Elsevier Saunders; 2013. pp 293-321.
- Dei Toss AP, Pedeutour F. Atypical lipomatous tumor/Well differentiated liposarcoma. In: Fletcher CDM, Unni KK, Mertens F, editors. *Pathology and Genetics of Tumours of Soft Tissue and Bone*. Lyon: IARC Press;2002. pp.35-7.
- Lucas DR, Nascimento AG, Sanjay BK, Rock MG. Well-differentiated liposarcoma. The Mayo Clinic experience with 58 cases. *Am J Clin Pathol* 1994;102(5):677-83.