Letter to the Editor

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# RE: "Fat-Free" Spindle Cell Lipoma in Retropharynx

Canan Altay, MD[1], Emine Burçin Tuna, MD[2], Sermin Özkal, MD[2], Ahmet İkiz, MD[3], Emel Ada, MD[1]

Departments of [1]Radiology, [2]Pathology, and [3]Otorhinolaryngology, Dokuz Eylul University, Faculty of Medicine, Izmir 35340, Turkey

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Dear Editor,

We read with interest by Lee et al. (1) about "Retropharyngeal Spindle Cell/Pleomorphic Lipoma", published in the May/June issue of the 2013 Korean Journal of Radiology. We would like to report a distinct radiologic presentation of a "fat-free" retropharyngeal spindle cell lipoma on magnetic resonance (MR) imaging.

Our patient was a 54-year-old woman who presented with dysphagia and neck swelling. She also complained of dyspnea with several months of duration. Neck CT and MRI were performed with routine parameters. MR imaging revealed a well-defined tumor arising from the retropharynx and extending to the parapaharyngeal region on the left side especially. The tumor was iso-intense to the muscles on both of T1- and T2-weighted images (WI) and had within tumor slightly hyper-intense areas on fat saturated T2WI (Fig. 1). The lesion showed mild heterogeneous enhancement on contrast enhanced T1WI and did not contain visible fat on all radiologic images. The patient underwent a surgical excision of the tumor via transcervical approach. The tumor appeared as a well-circumscribed solid mass. Histologic examination of the tumor revealed spindle cells with floret-like multinucleated cells surrounded by collagenous matrix without maturated fat tissue. The immunohistochemical study of tumor cells was consistent with the diagnosis of "fat-free" spindle cell lipoma.

Age and gender of patient in our case are similar to that of the patient with retropharyngeal spindle cell lipoma in previous study (1). However, spindle cell lipomas located in other sites of body typically occur in men (2). On histopathologic examination, the spindle cell lipoma contains mature fat and fibroblast-like spindle cells within matrix of mucin and collagen fibrils. The radiologic appearance of spindle cell lipomas depends on the rate of adipose and non-adipose components in the tumor. "Fat-free" spindle cell lipomas are very rare than fat containing types (2). The tumor mass of our patient showed low signal intensity on both of T1WI and T2WI due to the fact that it was composed almost entirely of spindle cells and collagen fibrils. Spindle cell lipomas have a wide range of radiologic appearance. There is an overlap of radiologic appearances of spindle cell lipomas with liposarcomas and other sarcomatous tumors, especially in cases with "fat-free" spindle cell lipomas.

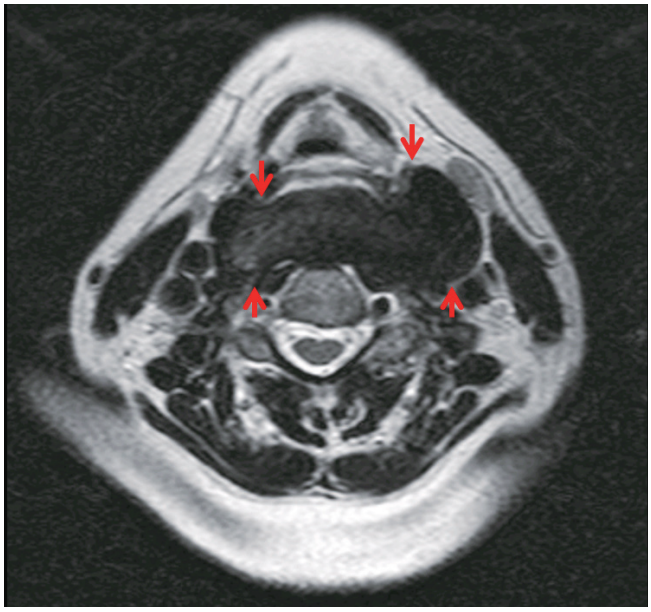

**Fig. 1. Turbo spin echo T2-weighted image shows retropharyngeal lesion (arrows), which is iso-intense to muscles with bilaterally lateral extension to parapharyngeal region.**

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**Corresponding author:** Canan Altay, MD, Department of Radiology, Dokuz Eylul University, Faculty of Medicine, Mithatpasa Street, Inciralti, Izmir 35340, Turkey.
• Tel: (90) 232 4125901 • Fax: (90) 232 2599723
• E-mail: cananaltay@yahoo.com

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