Spindle Cell Lipoma Adherent to the Digital Nerve in the Palm

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Dear sir,

Spindle cell lipoma, a solitary, slowly growing subcutaneous tumor, mainly in the posterior neck, shoulder girdle, upper back predominantly in men in the fifth to seventh decades. It can arise in other areas of the body. Johnson et al. reported a spindle cell lipoma in the orbital region; Toker et al. reported in the breast; Suster et al. reported in the gastrointestinal tract and Eckert et al. reported in the upper arm. Spindle cell lipomas are typically placed encapsulated in sub cutis, while occasionally they are poorly demarcated and can extend in to the dermis or underlying tissues. No case of spindle cell lipoma in the palm adherent to digital nerve has been reported in the literature. Here, we present a rare case of spindle cell lipoma adherent to the digital nerve in the palm.

A 43 years old male patient was admitted to our clinic for further examination of the mass occurring in his right palm 24 months ago and hypoesthesia of radial side of the third finger for 3 months. A physical examination revealed 4 cm × 3 cm subcutaneous mass in the right palmar area. Ultrasonography revealed well circumscribed and low-echo 4 cm×3 cm mass in the subcutaneous region of the palm. Furthermore,

heterogenous signal intensity on all pulse sequences was showed by magnetic resonance imaging. A fine needle biopsy reported a spindle cell lipoma. At exploration, there was a well-circumscribed mass, connected to the digital nerve. (Fig. 1a) The multi lobulated 34 mm diameter mass was yellowish-white on its cut surfaces, had a firm texture, and was clearly demarcated from the adjacent tissues by a thin fibrous capsule The patient had no recurrence in 46 months follow-up.

Spindle cell lipoma is a benign tumor distinguished by the replacement of mature adipocyte by collagen forming spindle cells. It is a mixture of short spindle cells, adipocytes, and ropey collagen bundles, sometimes with a myxoid stroma. The differential diagnosis includes dermatofibrosarcoma protuberance, angiomyofibroblastoma, nodular fasciitis and myxoid liposarcoma [1]. Lipoblasts, fat necrosis, and fat with atrophic changes are important to the differential diagnosis of liposarcoma and spindle cell lipoma. There was co-expression of CD34, bcl-2, and vimentin in the spindle cells. (Fig. 1b). Tardio also reported that co-expression of CD34 and bcl-2 was common in atypical adipocytic tumors in a recent study [2]. Spindle cell lipoma is most closely related to pleomorphic lipoma in terms of demographics and presenting location. Cytogenetically, most spindle cell and pleomorphic lipomas show common 16q or 13q abnormalities [3]. Some authors have reported on the intra dermal origin which presents with different clinical or morphological features such as, widespread anatomical distribution, female predilection and an infiltrative pattern. Also, Mounasamy et al. have reported single case of spindle cell lipoma of

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Fig. 1 **a.** Intraoperative view of the spindle cell lipoma and the digital nerve **b.** Spindle cells in non-lipogenic areas are CD34 positive. (CD34; Original magnification X200)

palm [4]. Definitive diagnosis of spindle cell lipoma is crucial to recognize that this is a benign tumor and avoid misdiagnosing the lesion as a myxoid liposarcoma. The treatment of option for spindle cell lipoma is a complete local excision and its recurrence is extremely rare.

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