

A Rare Case of Multiple Spindle Cell Lipomas

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Dear Editor:

We report the case of a 40-year-old Korean man who presented with a 4-year history of multiple subcutaneous nodules affecting his right upper arm, left forearm, and abdomen (Fig. 1). He had no relevant medical history. Histopathologic examination of skin biopsy from the right arm revealed a mixture of mature adipocytes, well-aligned spindle cells, numerous scattered mast cells, and a myxoid interstitial matrix. Spindle cells were observed parallel to coarse ropey collagen bundles (Fig. 2A, B). Immunohistochemical analysis showed the spindle cells were immunopositive for CD34 and vimentin. Local excisional biopsy from the left arm revealed similar histopathological findings as those in the right arm (Fig. 2C, D). Nodules on both arms were excised surgically. The patient has been under close observation without recurrence as of writing. Spindle cell lipoma (SCL) is a peculiar benign lipomatous tumor histologically characterized by mature adipocytes, mast cell infiltration, and abundant CD34-positive spindle cell proliferation with brightly eosinophilic dense collagen bundles (also termed ropey collagen)¹. The presence of scattered mast cells may cause the proliferation of CD34-positive spindle cells, because mast cells are a well-known trigger of mesenchymal cell proliferation and collagen production¹. SCL accounts for approximately 1.5% of all adipose tissue neoplasms. It usually occurs as a solitary lesion affecting the posterior neck, shoulder, or back and exhibits a predilection for elderly men². SCL is a histopatho-

logically variant form of lipoma. Skin lesions of SCL comprise lobulated masses of adipose tissue and areas of massive proliferation of collagen-forming spindle cells³. Diseases involved in the differential diagnosis of SCL include dermatofibrosarcoma protuberans, nodular fasciitis, neurofibroma, and lipoma-like or myxoid liposarcoma². Complete excision is usually curative for SCL, which is a benign tumor that shows rare local recurrence and has no risk of ag-

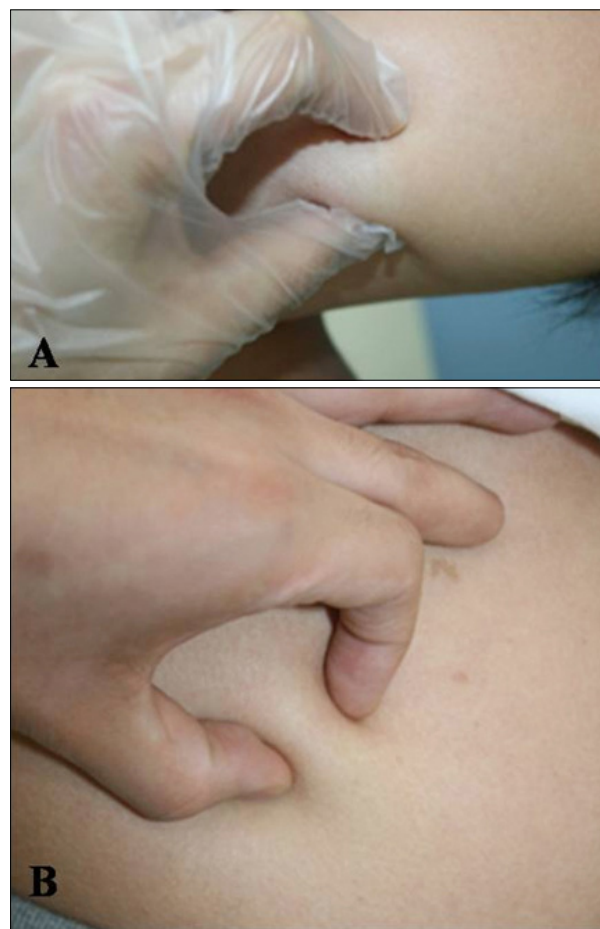


Fig. 1. Tender skin-colored hard slow-growing subcutaneous nodules on the right upper arm (A) and abdomen (B).

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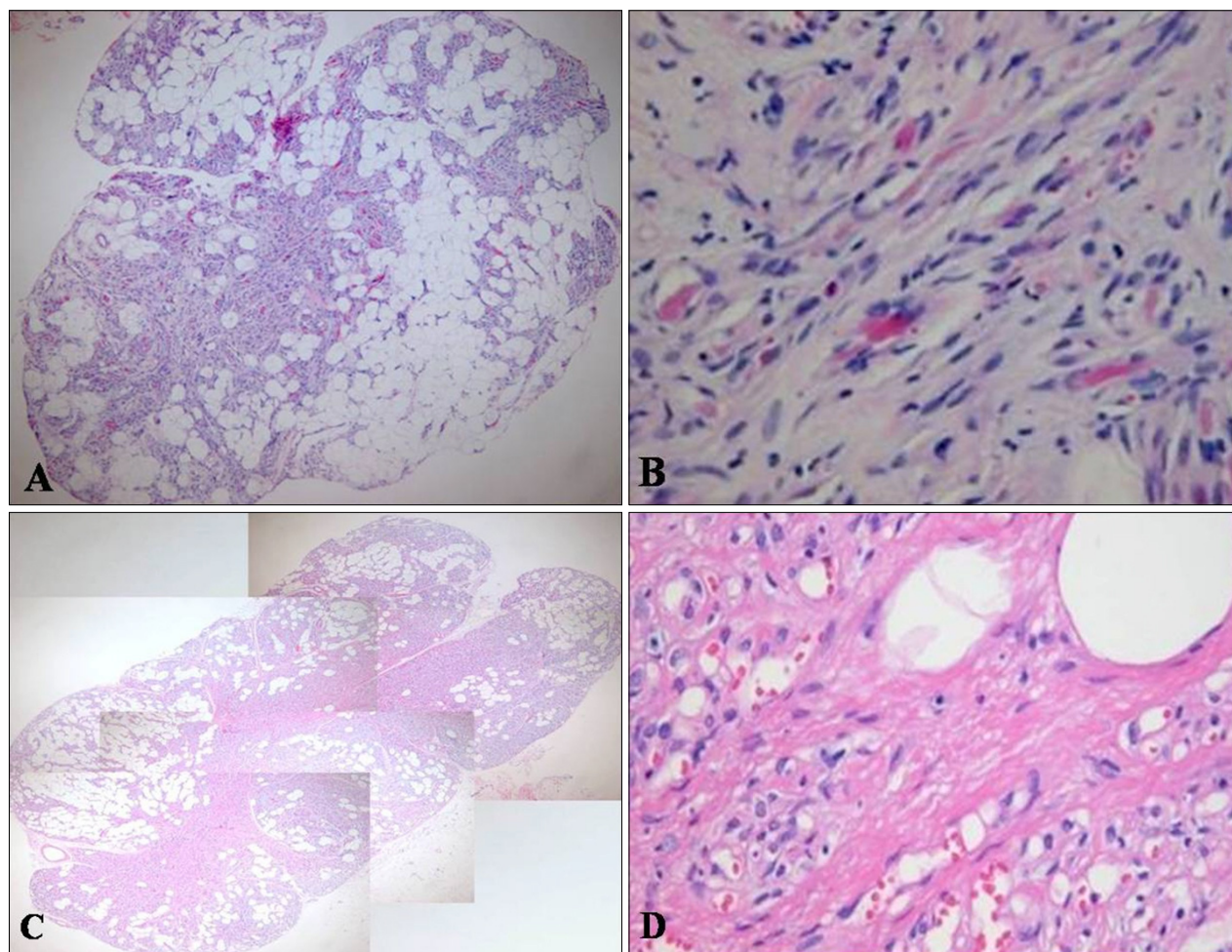


Fig. 2. Histopathological findings of biopsy specimens (A, B) on the right arm and (C, D) left arm (A~D: H&E). (A) A well-circumscribed mass ($\times 40$). (B) Uniformly sized spindle cells without nuclear pleomorphism or mitotic figures ($\times 400$). (C) A well-circumscribed mass ($\times 40$). (D) Uniformly sized spindle cells intermixed with mature adipocytes and without nuclear pleomorphism ($\times 400$).

gressive behavior⁴. However, multiple SCLs are exceedingly rare. To our knowledge, there are only 5 reports including 22 cases of multiple SCLs in the literature. Fanburg-Smith et al.⁵ report that the ratio of multiple to SCL ranges between 0.5% and 3%. The pathogenesis of SCL is unclear. The characteristic cytogenetic evidence of SCL is deletions of 16q13-qter and 13q⁴. However, karyotypic analysis was not performed in the present case. The clinical manifestation of multiple lesions of SCL spread sequentially in a caudal direction⁵. The distributions of the lesions in previously reported cases were mostly localized to the trunk, face/neck, or tongue only⁵. In summary, we report an extremely rare case of multiple SCLs. Our case has two unique points. First, multiple SCLs is a rare disease itself; to our knowledge, the occurrence of multiple subcutaneous SCLs has never been reported in Korea. Second, the lesions of our case were unusually lo-

cated on the upper extremities and abdomen.

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