## A Rare, Recurrent Spindle Cell Lipoma of the Nose

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Spindle cell lipomas are common benign tumours of adipose tissue, typically occurring in the posterior neck, shoulder and back in middle-aged to elderly men. Less commonly, spindle cell lipomas may occur in a wide range of other locations, but very rarely in the mid-facial area. They are usually well circumscribed and based in subcutaneous tissue, although dermal tumours also occur. Spindle cell lipoma was first described by Enzinger & Harvey in 1975 (1) and is considered a cellular variant of benign lipoma. Spindle cell lipomas represent approximately 1.5% of all lipocytic neoplasms and men are significantly more affected than women (9:1) (1–3).

To date, only a few cases of nasal spindle cell lipomas have been described (2–4). We report here a case of a very rare, recurrent spindle cell lipoma on the nose of a middle-aged woman.

## CASE REPORT

A 54-year-old woman was referred to our otolaryngology outpatient clinic due to a slowly progressing tumour on her right nasal vestibulum. She had first noticed the subcutaneous lump 1.5 years previously. No signs of infection were noted and the overlying nasal mucous tissue was intact. Clinical examination revealed a firm swelling in the lateral part of the patient's right nasal vestibular rim. The well-circumscribed tumour was removed and sent to a pathologist. The pathologist diagnosed a benign mesenchymal tumour, spindle cell lipoma, 10 mm in diameter, composed of mature adipocytes and fibrous stroma, without nuclear atypia. The tumour was positive for CD34 antigen staining, S-100 was positive in the adipocytes, and Ki-67-proliferation activity was low. For differential diagnosis, desmin was focally weakly positive, deemed non-specific, alpha-smooth muscle actin (alpha-SMA) was negative, as was HMB-45. The tumour was excised with possible negative tissue margins. Over the years, the surgical scar healed well.

After 10 years, the patient recognized a new, similar tumour approximately the size of a pea, next to the surgical scar. The tumour was a little painful to touch. Once again, she was referred to the Department of Otolaryngology outpatient clinic. An experienced otolaryngologist examined and operated the patient together with a dermatosurgeon (**Fig. 1**). The tumour was sent to a dermatopathologist. A similar CD34-positive spindle cell lipoma 6 mm in diameter was diagnosed, with negative healthy tissue margins (**Fig. 2**).

## DISCUSSION

Spindle cell lipomas consist of an intricate mixture of mature adipocytes and uniform spindle cells within a fibromyxoid stroma. They are sometimes difficult to distinguish from several other tumours with spindle cell stroma (e.g. dermatofibroma, neurofibroma, schwannoma, leiomyoma, liposarcoma). Spindle cells of spindle cell lipoma are positive for CD34, but negative for alpha-SMA and desmin. Adipocyte nuclei nearly always stain positively for S-100 (1, 2, 5).

The size of spindle cell lipomas varies from approximately 1 to 5 cm in diameter, but spindle cell lipomas as large as 42 cm in diameter have been described (6). The current patient's lipoma was approximately 1 cm in diameter, both primarily and at the time of the recurrence.

Spindle cell lipomas are benign, asymptomatic slowly progressing tumours. Although usually mobile and solitary, rare cases of familial spindle cell lipomas have been reported with multiple lesions in affected patients (6). To our knowledge, the current patient had no previous history of spindle cell lipomas or lipomas of any kind, and the family history was negative for spindle cell lipomas.

Local excision is the favoured treatment for spindle cell lipomas and there is no need to obtain wide surgical margins (1, 5). However, incomplete primary excision may lead to local reappearance of spindle cell lipomas and we speculate this to be the case with the current patient.



Fig. 1. Right alar rim (a) before and (b) after the second excision of spindle cell lipoma.

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In conclusion, spindle cell lipomas are a variant of benign lipomas. They rarely appear in the mid-facial area and are not common among women. The case reported here is therefore rare.

The authors have no conflicts of interest to declare.

## REFERENCES

- 1. Enzinger FM, Harvey DA. Spindle cell lipoma. Cancer 1975; 36: 1852-1859.
- 2. Sawamura S, Kajihara I, Jinnin M, Honda Y, Ihn H. Cuta-

Fig. 2. (a) Whole-slide image of the well-demarcated dermal tumour, with non-atypical spindle cell component and mature adipose tissue in fibromyxoid stroma. (b) The nuclei of the spindle cells are bland, with no pleomorphism, and the nuclei of mature adipocytes are inconspicuous and peripherally located. Hematoxylin-eosin: original magnification ×20.

neous spindle cell adenolipoma on the nose: a rare variant of lipoma. J Dermatol 2017; 44: e156-e157.

- 3. Tanthry D, Devan PP, Kumar KA, Bhandary R. A rare case of spindle cell lipoma of nose. J Surg Tech Case Rep 2012; 4: 110-111.
- 4. Gulbinowicz-Gowkielewicz MM, Kibiłda B, Gugała K. Spindle cell lipoma of the vestibule of the nose. Otolaryngol Head Neck Surg 2008; 139: 325-326.
- 5. Mentzel T, Rütten A, Hantschke M, Hornick JL, Brenn T. S-100 protein expressing spindle cells in spindle cell lipoma: a diagnostic pitfall. Virchows Arch 2016; 469: 435-438.
- 6. Fanburg-Smith JC, Devaney KO, Miettinen M, Weiss SW. Multiple spindle cell lipomas: a report of 7 familial and 11 nonfamilial cases. Am J Surg Pathol 1998; 22: 40-48.