Nevus lipomatosus superficialis (NLS) and spindle cell lipoma (SCL) are both relatively rare benign neoplasms. NLS can be further subdivided into two clinical types: the classical type and the solitary type. The classical type typically presents in the lumbosacral area at birth or within the first three decades of life as multiple soft, non-tender papules or nodules, which commonly coalesce to form plaques. The solitary form has no location preference and usually occurs later in life as a nodular lesion. A SCL is usually found in the subcutaneous tissues, with rare intradermal cases reported in the literature. This neoplasm most commonly occurs on the neck, shoulders, or back of middle-aged to elderly males as a subcutaneous nodule. In this case report, the authors present a rare and interesting presentation of a NLS with co-existing features of a dermal SCL.

**CASE REPORT**

A sixty-two-year-old male presented with a chief complaint of an asymptomatic, enlarging growth located on the left lower extremity that had been present for approximately three years. He denied associated symptoms including pain, tenderness, pruritus, bleeding, ulceration, or discharge. Furthermore, he denied any previous evaluation and treatment of the lesion. Patient reported no prior personal or family history of skin cancer.

On examination, the patient was a Fitzpatrick skin type II with a solitary 1.5 cm skin-colored to pink pedunculated papule on the left proximal posterior thigh as shown in Figure 1. A shave biopsy of the lesion was performed and a differential diagnosis included neurofibroma, benign intradermal nevus, fibroepithelial polyp, basal cell carcinoma, and amelanotic melanoma.

Histologic sections demonstrated a pedunculated papule with basket-weave stratum corneum and a relatively normal appearance to the epidermis. Within the dermis, relatively normal collagen bundles with an increase in fibroblasts within the superficial dermis were observed. Of note, lobular aggregations of adipocytes were found to be replacing much of the dermis with many areas of the adipocytes showing spindle cells and abundant mucin (Figures 2a-c). Based on the histology, a diagnosis of NLS was made. NLS may be differentiated from other entities in the differential diagnosis such as nevus sebaceous, neurofibromas, fibrolipomas, hemangiomata, lymphangiomata by clinical presentation, and definitively by histology. Histopathology of NLS shows a dermal proliferation of mature adipocytes that may be connected to the subcutaneous tissue or separated from the subcutis by collagen. The adipocytes may present sparsely between collagen bundles or form aggregates around blood vessels or eccrine glands. Infrequently, spindle cells representing immature fat cells may be present. Cases of co-existing café-au-lait macules, scattered leukokeratosis, hypertrichosis, and comedo-like lesions within a NLS have been reported.1,4

A spindle cell lipoma (SCL), and its pleomorphic subtype, in contrast to NLS, most commonly presents in the fourth to seventh decade of life as a well-circumscribed mass in the subcutaneous tissue of the upper back, posterior neck, or shoulders.2 Diagnosis of SCL and the pleomorphic subtype requires mature fat cells, spindle cells, and strands of strongly eosinophilic collagen.3 Although SCL typically arises in subcutaneous tissue, rare cases of SCL and the pleomorphic subtype occurring within the dermis have been reported.2 The dermal SCL and pleomorphic lesions differ from the classic SCL as they are poorly circumscribed and unencapsulated.4 In addition, the dermal variant of a SCL may not have a predilection for any specific site or may have a slight predilection for the thigh-buttocks-groin area.8

Our case highlights a rare and interesting presentation of a NLS with co-existing features of a dermal SCL, one of only a few reported in the literature. Neither NLS or SCL have concern for systemic involvement or malignancy. Therefore, treatment is not necessary for any reason other than cosmesis, and excision is curative with rare recurrence. Rarely, these lesions may ulcerate with associated foul-smelling discharge. In such instances, surgical excision may be warranted.1,3

**REFERENCES**