Large Skin Tags on the Thigh

Dear Editor,

A 25-year-old male presented with closely aggregated, large, soft polypoid skin-coloured outgrowths ranging from 3 mm to 3 cm over the medial aspect of left upper thigh from the past 3 years. The lesions had been electrosurgically removed about a year back but there was recurrence over the past few months. The larger lesions were pedunculated and grouped while the smaller ones were sessile and discrete. The lesions were otherwise asymptomatic except for discomfort due to friction against the other thigh during walking. Most of the larger lesions had a conspicuous convoluted surface. The surrounding and the intervening skin was slight hyperpigmented [Figure 1]. Histopathology of one of the pedunculated lesions revealed the presence of aggregated mature lipocytes, especially about the blood vessels in the dermis [Figures 2 and 3], with no connection with the subcutis—features consistent with Nevus lipomatosus cutaneous superficialis (NLCS).

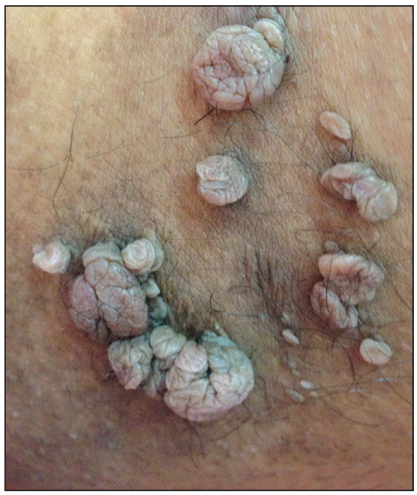

Figure 1: Multiple confluent and discrete soft fleshy polypoid lesions with the cerebriform surface

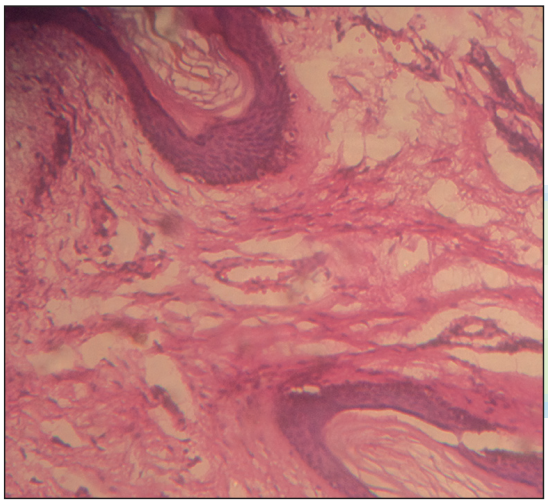

Figure 2: Photomicrograph showing acanthotic papillomatous epidermis with the presence of mature adipocytes (clear spaces) in the papillary dermis. [H and E, 40×]

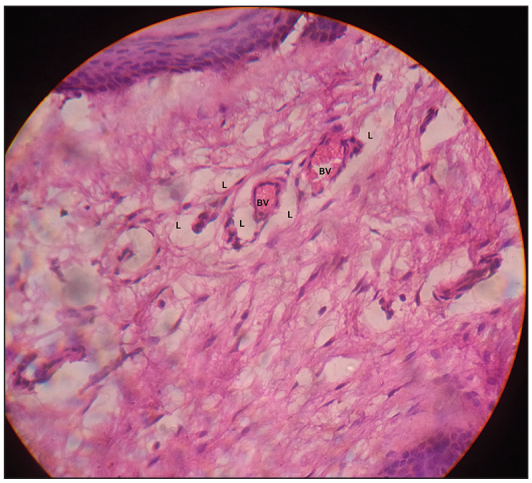

Figure 3: Photomicrograph showing aggregation of lipocytes (L) around the blood vessels (BV) [H and E, 40×]

NLCS is a rare connective tissue hamartoma characterised by the presence of ectopic mature adipocytes in the dermis. Usual age of occurrence is the second decade of life with equal sex predilection. Clinically, two forms of NLCS have been described—multiple and solitary. Multiple, soft, flesh-coloured papulonodules, sometimes in a linear pattern, was first described by Hoffmann and Zurhelle (1921).[1] The lesions may be sessile or pedunculated and generally occur in a clustered fashion with either a smooth, or a rather characteristic cerebriform/wrinkled surface with or without comedonal plugs. The gluteal region, upper thigh and the back are frequently involved.[2] The solitary form occurs later in life and commonly involves the trunk. It may develop as a sessile dome-shaped papule, a plaque, or a pedunculated lesion that may be indistinguishable from a broad fatty fibroepithelial polyp. The occurrence of both the forms at unusual sites has also been documented.[3,4] Although the exact pathogenesis of NLCS is unclear, several hypotheses like adipocyte metaplasia of the dermal connective tissue during degenerative process, and the origin of lipocytes from the pericytes of superficial dermal vessels have been put forth. Some authors believe NLCS is a true hamartoma characterised by heterotrophic proliferation of lipocytes.[5] Histopathologically, the pathognomonic finding is the presence of mature lipocytes in papillary dermis, especially aggregated around the blood vessels, without any connection to the subcutis. The number of lipocytes may be quite variable ranging from less <10% to >70% of the lesion. The perivascular concentration of the lipocytes is especially pronounced when these are fewer. Other dermal changes include thickening of collagen, and an increase in the number of blood vessels and fibroblasts. The overlying epidermis may either be normal or acanthotic and papillomatous with or without dilated follicular ostia.[2,6] NLCS should be differentiated from maturing dermal melanocytic nevi, papulonodular lesions of Goltz syndrome (focal dermal hypoplasia), and large fibroepithelial polyps (acrochordons). Dermal melanocytic nevi appear as skin-coloured dome-shaped papules or nodules in which the nevomelanocytes are fewer as these are replaced by fatty tissue during the process of their maturation.[7] Soft yellowish nodules in a linear pattern may be seen in Goltz syndrome as a result of herniation of the subcutaneous fat in to the attenuated dermis. Histopathologically, the presence of fat beneath the epidermis that is connected to the subcutis and profound attenuation of collagen and appendages differentiate these lesions of Goltz syndrome from NLCS.[8] Solitary lesions of NLCS are indistinguishable both clinically and histopathologically from the solitary bag-like fibroepithelial polyps except that the former may have a broader base.[6,7,9] NLCS is

a benign asymptomatic condition and treatment is indicated only for cosmetic reasons. Complete excision is recommended as recurrence following ablative procedures, as in this case, has been reported.[5]

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