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Rare Solitary Naevus Lipomatosis Cutaneous Superficialis: Histopathology A Diagnostic Clue

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Abstract

We present a case of 45 year old female, presenting with a solitary, asymptomatic, pedunculated mass since childhood. The lesion was totally excised and was sent for histopathological evaluation and was found to be Naevus lipomatosis cutaneous superficialis which is a rare form of hamartoma in which mature adipocytes are found in the dermis.

Key words: Adipocytes; Hamartoma; Lipomatosis

Introduction

Naevus lipomatosis cutaneous superficialis (NCLS) is a rare form of hamartoma characterized by presence of mature adipocytes in dermis. Clinically it presents in two forms namely, the classical Hoffmann-Zuhellie form characterize by multiple, soft non – tender, pedunculated, yellowish or skin colored, nodules or plaques of varying sizes. In the solitary form, characterized by a solitary, pedunculated, flesh colored papule or nodule.¹

Case report

A 45 year female presented to our outpatient department (OPD) with a solitary pedunculated mass near groin since childhood. It was asymptomatic. Her concern of being a cancer brought her to our OPD. On examination, the mass was yellowish to skin colored, pedunculated, soft in consistency with cerebriform surface measuring about 9cmx5 cm over left lower quadrant of abdomen near groin as shown in Figure 1. There were no cafe au lait macules, axillary freckling or any other skin lesions in other parts of the body including palms and soles. Scalp, nails and mucous membranes were normal. Systemic examination was normal. The lesion was totally excised and was sent for histopathological examination, with differential

diagnosis of neurofiroma, Lipoma, giant achrochordon, and Nevus lipomatous cutaneous superficialis. The gross section of the lesion is shown in Figure 2. In histopathology there were presence of adipocytes in dermis which was consistent with diagnosis of Naevus lipomatosis cutaneous superficialis as shown in Figure 3 and Figure 4.



Figure 1: Pedunculated mass of yellowish to skin colored on left lower quadrant near left groin

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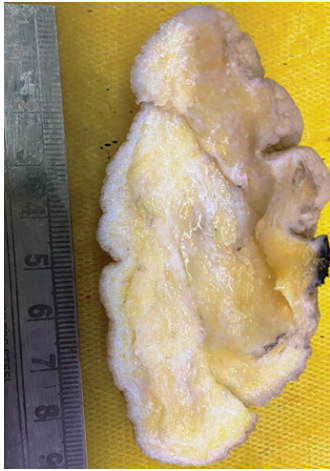


Figure 2: Cut section of the lesion shows yellowish fatty appearance extending to deeper planes.

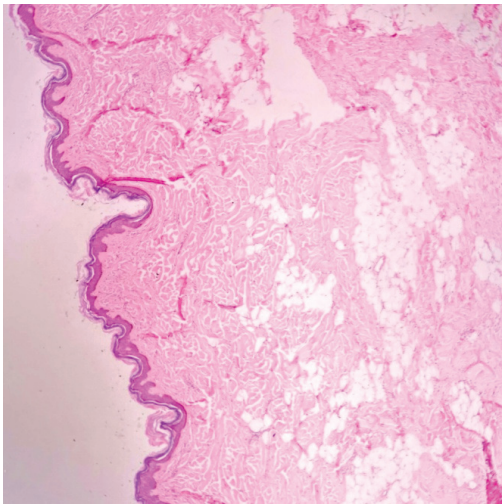


Figure 3: Photomicrograph showing unencapsulated lesion comprising of mature adipose tissue within the superficial dermis.(H&E 100X)

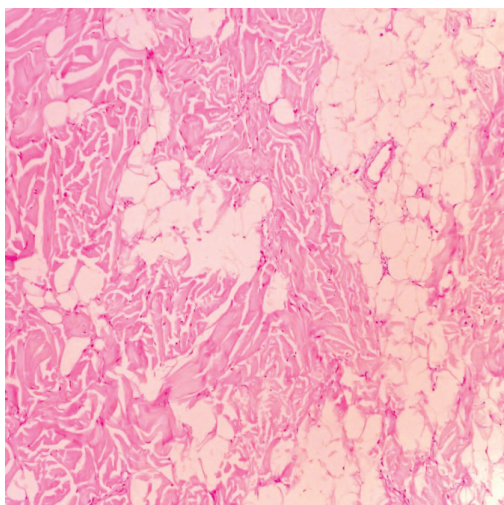


Figure 4: Photomicrograph shows lobules of mature adipose tissue infiltrating the dermal collagen. (H& E 100X)

Discussion

Naevus lipomatosis cutaneous superficialialis was first coined by Hoffman and Zuhelle in 1921.² There is no familial or sex predilection.¹ Clinical presentation of the classical lesions are usually present at birth or in the first two to three decades of life in a zonal or segmental distribution over the buttocks, lower back or upper thighs whereas solitary types develop in adults and show a wider distribution in the skin. The nodules can be pedunculated or sessile with smooth or wrinkled surface sometimes may be hairy or show comedo like plugs. The solitary clinical form of NLCS presented as a solitary papule or nodule mimicking a skin tag which usually appears during the third to sixth decades of life and can occur anywhere on the skin.^{1,3}

Rarely solitary types can also occur in sites like the scalp, eyelids, nose and clitoris.⁴

Histopathological features are similar in both clinical presentation with varying degree of adipose tissue (10% to 50%) embedded between collagen bundles of the dermis.^{5,6}

The etiopathogenesis of NLCS is still unknown. As proposed by Hoffman and Zurhelle that it is the degenerative changes in the dermal collagen and elastic tissue which leads to the deposition of adipose tissue in the dermis.⁷

Another hypothesis states that adipose metaplasia of dermal connective tissue or representation of a true nevus occurs from focal heterotropic development during embryonic life. Recently deletion of 2p24 in the NLCS has been reported.⁸ surgical excision is the treatment of choice. Psychological concern related to be of cancerous origin from patient point of view and confirming with histopathological examination is a very important diagnostic tool to have clinico-histopathological correlation for treating physician and proper counseling for affected patients. We present this case for its rarity and till date not yet been reported from this part of the world.

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