Journal of the Turkish Academy of Dermatology
eISSN 1307-394X

Case Report

Nevus Lipomatosus Cutaneous Superficialis: A Case Report with Histologic Findings

Mohammad Reza Ranjkesh,[1] MD, Quadim H. Herizchi,[1] MD, Neda Yousefi,[1*] MD

Address: Department of Dermatology, Sina Hospital, Tabriz University of Medical Science, Tabriz, Iran
E-mail: neda_y@yahoo.com

* *Corresponding author*: Neda Yousefi, MD, Department of Dermatology, Sina Hospital, Azadi Ave Tabriz, Iran.

Published:
J Turk Acad Dermatol 2009; **3 (1)**: 93103c
This article is available from: http://www.jtad.org/2009/1/jtad93103c.pdf
Key Words: nevus lipomatosus, ectopic adipose tissue, young adult

Abstract

Observations: A 22-year old woman presented with a 12-year history of masses on her lower abdomen. The lesions started as a single lump and increased in number and size for 6 years, and remained unchanged thereafter. The histologic examination confirmed ectopic mature adipose tissue within dermis that supported the clinical diagnosis of nevus lipomatosis. Because of the cosmetic point of view, the patient underwent staged excision until she was free of lesions.

Introduction

Nevus lipomatosus cutaneous superficialis (NLCS) is a rare idiopathic hamartomatous anomaly, the classic type of which presents with asymptomatic grouped, soft, skin-colored to yellow papules and nodules within the first three decades of life.

There is no familial tendency, nor sex predilection. Histology is characteristic with ectopic mature adipose tissue within dermis.

Treatment is not indicated except for cosmetic purposes.

Case Report

A 22 year-old healthy woman presented with a 12-year history of 'growths' on her lower abdomen that had started as a single lump over the region. Over time, new lesions developed and increased in size but after 6 years masses stopped growing and changing.

The lesions did not change during pregnancy. The lesions caused no symptoms except for unsightly appearance. There was no family history of similar lesions. Physical examination revealed multiple soft, skin–colored to hyperpigmented grouped papules and nodules coalescing into plaques over 5 x 8 cm of the abdomen (**Figure 1**).

The plaques had a wrinkled, cerebriform surface (**Figure 2**). One nodule was excised for histologic examination.

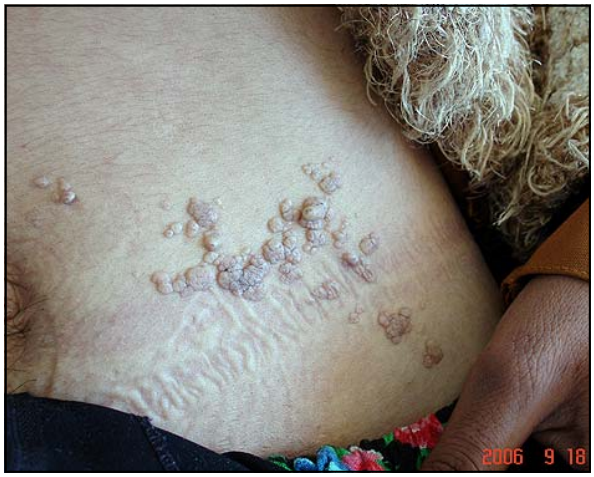

Figure 1. Skin colored grouped papules on abdomen

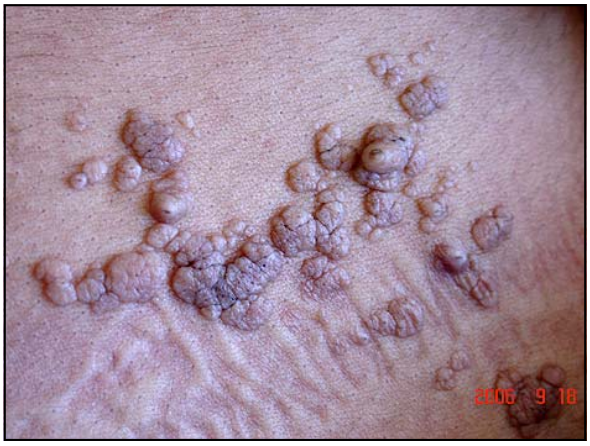

Figure 2. The plaques presented with cerebriform surface

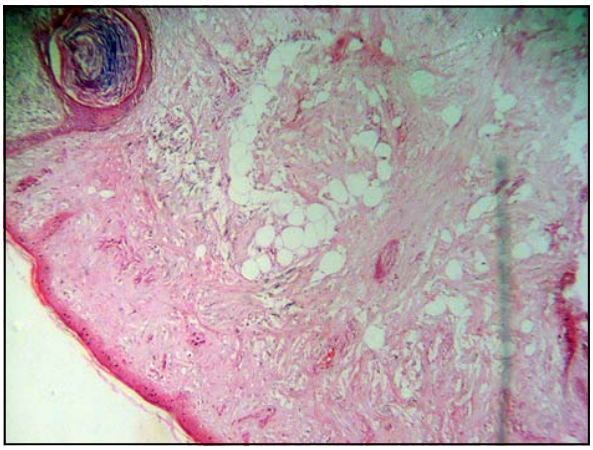

Figure 3. Slight papillomatosis in the epidermis (HE)

The epidermis was normal to slightly papillomatous and there were aggregates of mature adipocytes in the deep dermis (**Figure 3** and **Figure 4**). These findings supported the clinical diagnosis of nevus lipomatosus. Staged excision was performed for the patient until the lesion was completely removed.

Discussion

NLCS is a rare idiopathic hamartomatous anomaly with ectopically situated mature adipocytes within the dermis [**1**]. Clinically there are two types. The classic (or multiple) type [**2**] usually presents within the first 3 decades of life with clusters of soft, fleshy skin colored or yellow nodules having either smooth and wrinkled or cribriform and *peau d'orange* appearance, located most commonly on the lower trunk, especially on the back, buttocks or hips or abdomen, and on the upper posterior thighs [**1, 3, 4, 5**]. Rare involvement of the face [**6**] or scalp [**7**] have been reported. They are generally present at birth, but may first appear during childhood or adolescence [**4, 8**].

They are almost invariably asymptomatic, although occasionally ulceration may occur [**9**]. The solitary form of NLCS usually appears during the third to sixth decades of life as a single papule or nodule without a favoured location [**3, 10, 11**]. There is no evidence of a familial tendency or sex predilection in either clinical type [**3**]. There are reports of coexisting café-au-lait macules, leukodermic spots, over lying hyper trichosis, and comedo like alteration[**3, 12**].

A recent report described a giant NLCS with multiple folliculosebaceous cystic hamartomas and dermoid cysts [**13**]. A case of NLCS with localized scleroderme like appearance has been reported [**14**]. The differential diagnosis before biopsy may include old nevocellular nevi, sebaceous nevus, neurofibromas, connective tissue nevi, epidermal nevi, lipomas, acrochordones, focal dermal hypoplasia, lipoblastomatosis and Michelin tire baby syndrome. Histology reveals groups of ectopic mature adiocytes between the collogean bundles in the dermis with no connection of these adipocytes with the subcutaneous fat [**3**]. Similar dermal collections of the adipose tissue may occure as a component of intradermal melanocytic naevi [**3**], and in pedunculated lipofibroma [**15**]. To date, there have been no reports of malignant degeneration and recurrences are extremely rare, so treatment is not medically necessary [**3**].

For cosmetic purposes, surgical excision is the best choice [**3, 16**].

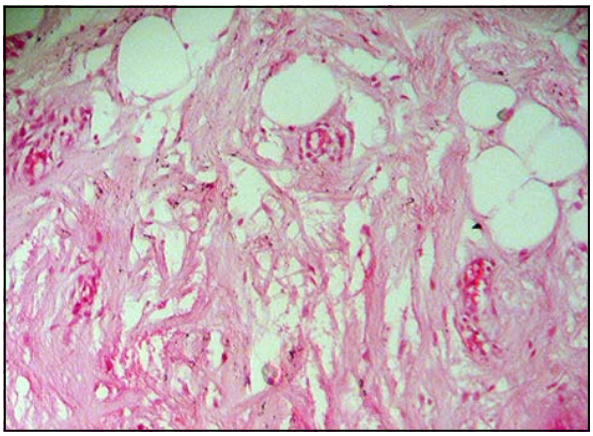

Figure 4. Mature adipocytes in the deep dermis (HE)

References

1. Abel R, Dougherty JW. Nevus lipomatosus cutaneous superficialis (Hoffman–Zurhelle): Report of two cases. Arch Dermatol 1962; 85: 524-526. PMID: 13858911
2. Hoffman E, Zurhelle E. Uber einen Naevus lipomato der cutaneus superficialis der liken Glutaalgegened. Arch Dermatol Syphilol 1921; 130: 327-333.
3. Jones EW, Marks R , Ponysehirun D. Naevus superficialis lipomatosus: A clinicopathological report of twenty cases. Br J Dermatol 1975: 13: 121-133. PMID: 1235780
4. Finley AG, Musso LA. Naevus lipomatosus cutaneus superficialis (Hoffman-Zurhelle). Br J Dermatol 1972; 87: 557-564. PMID: 4648802
5. Dotz W, Priolean PG. Nevus lipomatosus cutaneous superficialis: A light and electron microscopic study Arch Dermatol 1984; 120: 376-379. PMID: 6231000
6. Park HJ, Park CJ, Yi JY et al. Nevus lipomatosis superficialis on the face. Int J Dermatol 1997; 36: 435-437. PMID: 9248887
7. Chanoki M, Sugamoto I, Suzuki S, Hamada T. Naevus lipomatosis cutaneous superficialis of the scalp. Cutis 1989; 43: 143-144. PMID: 2702857
8. Holtz KH. Beautrag Zur Histologic der Naevus lipomatodes cutaneus superficialis (Hoffman-Zurhelle). Arch Dermatol Syphilol 1955: 199: 275-286. PMID: 13908605
9. Girglia HS, Bhattacharya SK. Naevus lipomatosus cutaneous superficialis. Int J Dermatol 1975; 14: 273-276. PMID: 1132930
10. Knoth W. Über Naevus lipomatosus cutaneus superficialis Hoffman – Zurhelle and Über Naevus naero cellulris partim lipomatodes. Dermatologica. 1962; 125:161-173. PMID: 14457327
11. Moore JK, Kalus M. Nevus lipomatosus. Superficialis circumscriptus. Plast Reconstr Surg 1980; 66: 617-619. PMID: 7208677
12. Robinson HM, Ellis FA. Naevus lipomatosus subepidermalis seu superficialis cutis. Arch Dermatol Syphilol 1973; 35: 425.
13. Brasanac D, Boricic I. Giant nevus lipomatosus superficialis with multiple folliculosebaceous cystic hamartomas and dermoid cysts. J Eur Acad Dermatol Venereol 2005; 19: 84-86. PMID: 15649197
14. Ioannidou DJ, Stefanidou MP, Panayiotides JG, Tosca AD. Nevus lipomatosus cutaneous superficialis (Hoffmann-Zurhelle) with localized scleroderme like appearance. Int J Dermatol. 2001; 40: 54-57. PMID: 11277956
15. Nogita T, Won T-Y, Hidan A et al. Pedunculated lipofibroma: A clinicopathologic study of thirty two cases supporting a simplified nomenclature. J Am Acad Dermatol 1994; 31: 235-240. PMID: 8400407
16. Lane JE, Clark E, Morzec T et al. Nevus lipomatosus cutaneous superficialis. Pediatr Dermatol 2003; 20: 313-314. PMID: 12869151