

Nevus lipomatosus cutaneous superficialis*

Gustavo de Sá Menezes Carvalho¹
Alzinira Souza Herênio¹
Eliane Ruth Barbosa de Alencar¹

Silvana Maria de Morais Cavalcanti¹
Márcia Almeida Galvão Teixeira¹
Sergio Paulo Mendes Gonçalves¹

DOI: <http://dx.doi.org/10.1590/abd1806-4841.20164570>

Abstract: We report a case of nevus lipomatosus cutaneous superficialis of Hoffman-Zurhelle (NLCS), with multiple lesions, in a ten-year-old child. The NLCS is considered rare. The classical clinical presentation is characterized by multiple skin-colored or yellowish papules and nodules, which can have a linear distribution. Histologically, it is characterized by the presence of mature ectopic adipocytes in the dermis. The main therapeutic option is surgical excision. The classical Nevus lipomatosus cutaneous superficialis is reported in this case.

Keywords: Adipocytes; Skin abnormalities; Nevus; Skin

INTRODUCTION

Nevus lipomatosus cutaneous superficialis (NLCS) is a rare entity. It was first described by Hoffman and Zurhelle in 1921.¹ According to the literature (LILACS, IBECs, MEDLINE, Biblioteca Cochrane, SciELO), the latest case in Brazil was published in 1999 by Almeida et al. Clinically, the disease is characterized by multiple non-painful pedunculated, cerebriform, yellowish or skin-colored papules or nodules, which can have a linear distribution.^{1,2} Histologically, it is characterized by the presence of mature ectopic adipocytes in the dermis. We report a linear variant of NLCS in a child.

CASE REPORT

We report a ten-year-old mulatto patient with a history of asymptomatic lesions, which had been progressing since the age of two. Dermatological examination revealed skin-colored plaque lesions, irregular surface, on the left arm, in the right inguinal region, mesogastric region, and on left flank in a linear distribution (Figure 1). Histopathological examination showed mature ectopic adipocytes grouped into irregular strips between the collagen bundles of the reticular dermis, consistent with the diagnosis of NLCS (Figures 2 and 3, slide).

DISCUSSION

NLCS is characterized by multiple yellowish or skin-colored papules or nodules. They can affect the pelvis, lumbosacral region, and buttocks.³ They are rarely located in other areas. Festa Neto et al. (1984) reported the first case of NLCS in Brazil in a 4-year-old patient with multiple hairy lesions on the wrist.⁴



FIGURE 1: Clinical appearance of the NLCS: papules in linear distribution located in the right inguinal region

Received on 13.03.2015

Approved by the Advisory Board and accepted for publication on 04.05.2015

* Work performed at the Department of Dermatology of the Hospital Universitário Oswaldo Cruz - Universidade de Pernambuco (HUOC-UPE) - Recife (PE), Brazil.

Financial Support: None.

Conflict of Interest: None.

¹ Universidade de Pernambuco (UPE) - Recife (PE), Brazil.

©2016 by Anais Brasileiros de Dermatologia

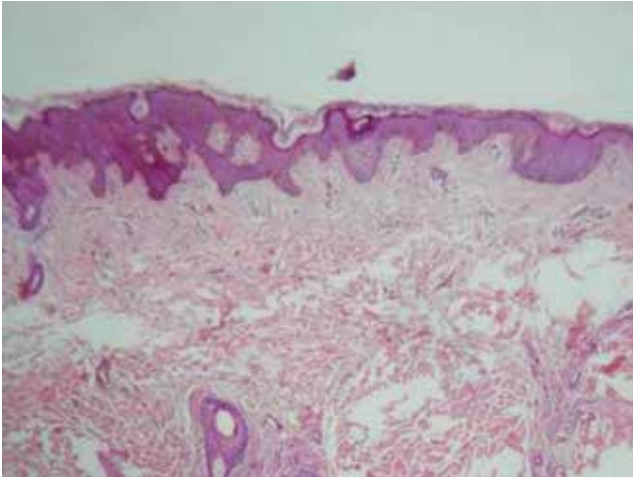


FIGURE 2: Deposition of adipose tissue in the dermis (HE x10)

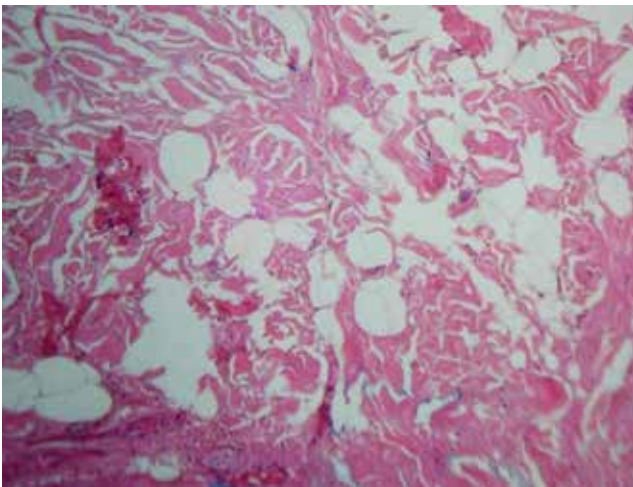


FIGURE 3: Mature ectopic adipocytes grouped in irregular strips between the collagen bundles of the reticular dermis (HE x40)

NLCS exists in two clinical varieties: 1) the solitary form, with a single lesion and variable location; 2) the linear classic form, with multiple lesions in the pelvic and gluteal regions, as described by Hoffman and Zurhelle.¹ Its clinical aspect may vary from lobulated tumor lesions – with a pleated cerebriform appearance – to small neoforations covered by normal skin – producing just a slight elevation that may go unnoticed. Occasionally, these lesions can present with hair growth.^{5,6} The present case was characterized by multiple lesions with a linear distribution.

The pathogenesis of NLCS is still not well defined. Jones (1975) suggested that ectopic adipocyte would originate from precursor cells from the dermal vessels.⁶ Other authors consider the hypothesis that the deposition of adipocytes is caused by degenerative alterations of dermal collagen bundles and elastic tissue.^{6,7}

Histopathologically, there is, in the superficial and middle layers of the dermis, the presence of dispersed or grouped lobules of adipose tissue, composed of well-differentiated adipocytes – preferably in a perivascular distribution – and surrounded by collagen fibers with normal appearance.^{7,8}

Clinical differential diagnosis of the NLCS includes other tumors or nevi that may be linear or multiple and zosteriform in distribution, such as: connective nevus, sebaceous nevus and verrucous nevus.⁹ Our patient had lesions that clinically resembled connective nevus. However, histopathology demonstrated the presence of adipocytes in the dermis, confirming the diagnosis of NLCS. The therapeutic option for this nevus is surgical excision, with no reports of other forms of treatment.^{2,10} □

REFERENCES

- Hoffmann E, Zurhelle E. Ubereinen nevus lipomatodes cutaneous superficialis der linkenglutaalgegend. *Arch Dermatol Syph.* 1921;130:327-33.
- Khandpur S, Nagpal SA, Chandra S, Sharma VK, Kaushal S, Safaya R. Giant nevus lipomatosus cutaneous superficialis. *Indian J Dermatol Venereol Leprol.* 2009;75:407-8
- Saeb M, Vega ME. Nevo lipomatoso cutâneo superficial: a propósito de tres casos en la cara y la piel cabelluda. *Dermatología Rev Mex.* 2000;44:73-6.
- Neto CF, Iamaguchi T, Cucê LC. Nevo lipomatoso cutâneo superficial - Um caso de localização insólita. *An Bras Dermatol* 1984;59:93-6.
- Dhamija A, Meherda A, D'Souza P, Meena RS. Nevus lipomatosus cutaneous superficialis: An unusual presentation. *Indian Dermatol Online J.* 2012;3:196-8.
- Jones EW, Marks R, Pongsehirun D. Naevus superficialis lipomatosus. A clinical and pathological report of twenty cases. *Br J Dermatol.* 1975;93:121-33.
- Buch AC, Panicker NK, Karve PP. Solitary nevus lipomatosus cutaneous superficialis. *J Postgrad Med.* 2005;51:47-8.
- Domínguez F, Sánchez CH. Placa asintomática en región lumbar. *Piel.* 1998;13:38-40.
- Almeida JH, Gvehr D, Pinto I. Nevo lipomatoso superficial de aparecimento tardio. *An Bras Dermatol.* 1999;74:601-3.
- Atherton DJ; Moss C. Naevi and other developmental defects. In: Burns T, Breathnach S, Cox N, Griffiths C, editors. *Rook's textbook of dermatology.* 7th ed. Oxford: Blackwell Sciences; 2004. p. 15.1-15.114

MAILING ADDRESS:

Gustavo de Sá Menezes Carvalho
R. Arnóbio Marques, 310
Santo Amaro
50100-130 - Recife - PE
Brazil
E-mail: gustavo.carvalho@msn.com

How to cite this article: Carvalho GSM, Cavalcanti SMM, Herênio AS, Teixeira MAG, Alencar ERB, Gonçalves SPM. Nevus lipomatosus cutaneous superficialis. *An Bras Dermatol.* 2016;91(5 Supl 1):S114-5.