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PHOTOLETTER TO THE EDITOR

Nevus lipomatosus superficialis (Hoffmann-Zurhelle). Three new cases including one with ulceration and one with ipsilateral gluteal hypertrophy.

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Abstract

Nevus lipomatosis superficialis is a rare, asymptomatic hamartoma of skin. We report 3 adult patients with NLS of Hoffmann – Zurhelle type, 2 males and a female. Two cases showed clinical peculiarities – ulceration or association with ipsilateral gluteal hypertrophy. Reduction buttock lift was performed to improve body contour. In conclusion, nevus lipomatosis superficialis can become symptomatic. Although simple surgical excision leads to a complete cure in the majority of cases, sometimes more complex procedures become necessary. (*J Dermatol Case Rep*. 2013; 7(2): 71-73)

Key words:

nevus lipomatosis superficialis, ulceration, ipsilateral gluteal hypertrophy, lipectomy

Nevus lipomatosis superficialis (NLS) is a rare cutaneous hamartoma. The clinical findings are dominated by yellowish, painless exophytic papules and nodules, sometimes pedunculated, with cerebriform surface.[1] Two types are differentiated: (i) solitary NLS usually seen in adults that can occur in any region of skin, (ii) the classical type Hoffmann-Zurhelle of the lower trunk (lower back, buttocks and thighs) presented at birth of developing during childhood and adolescence.[2,3]

The lesions are composed of mature adipocytes with normal but numerically reduced adnexal structures. In addition, NLS with abnormalities of hair follicles have been described.[4]

We report on 3 new cases, 2 with unusual clinical symptoms.

We analyzed the files of our hospital during March 2001 – March 2012 for NLS. Three adult cases could be identified.

The histopathology demonstrated mature adipocytes in the upper dermis interposed with collagen bundles. There was no connection between

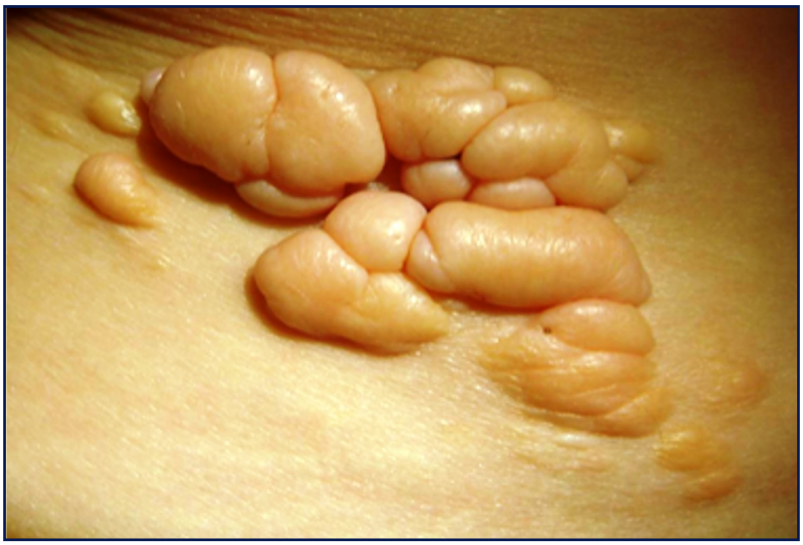

Figure 1

Nevus lipomatosis superficialis (Hoffmann-Zurhelle) on flank (Patient #1). (a) Clinical presentation. (b) Histopathology with mature adipocytes in the dermis are pathognomonic (HE x 2).

the ectopic adipose tissue and subcutaneous adipose tissue.

Clinical presentation and treatment: A 38-year-old female presented with classical type of the left lower flank (Fig. 1). She reported temporary superficial inflammation due to shear forces of clothes.

A 68-year-old male with classical type NLS showed an eroded plaque on the right buttock (Fig. 2). This case nicely demonstrates the reduction of mechanical protection in areas of NLS. Conservative good ulcer care was of no benefit. In both patients a complete excision with primary wound closure has been performed.

The 3rd patient was a 24-year-old male with a circumscribed plaque on the right buttock associated with hemilateral gluteal hypertrophy. He reported lower back problems while sitting. After histological confirmation of NLS, we performed a reduction buttock lift on the right site (Fig. 3A-D) Gluteal reduction was performed using incision that began laterally from the sacral triangle and proceeded downward slightly off the gluteal midline to continue to the infragluteal fold. Subcutaneous adipose tissue was dissected superficially to the gluteal fascia and a banana-shaped excision of skin and subcutaneous tissue was performed. After careful closure of bleeding vessels, lipectomy of deep subcutaneous adipose tissue was performed above the gluteal fascia and inferior to the protective adipofascial system (PAFS). Excess tissue was removed, minor bleedings were stopped by electrocautery, and wound closure was performed in multiple layers. Wound healing was uneventful.

Aesthetic and functional results were satisfying (Fig. 4).

NLS is a rare hamartoma. Differential diagnoses include neurofibroma, lymphangioma or hemangioma, fibroepithelial polyps, and lipomas. Often NLS remains asymptomatic. That was not the case in our series of patients, although symptomatology varied. Ulceration is an uncommon event.[5] Association of NLS with gluteal hypertrophy has not been reported so far.

The majority of cases can be cured by simple excision and primary wound closure. In patient # 3, however, NLF was associated with a symptomatic unilateral gluteal hypertrophy.

A variety of techniques have been developed to improve contour of buttocks, mainly for aesthetic reasons: lipectomy, liposuction, liposculpture, and implant techniques.[6] For patient # 3 with unilateral gluteal hyperplasia we wanted to improve the body contour by lipectomy.

The gluteal adipose tissue is stabilized by an anchoring 3-D network by *Ligamenta retinacula* cutis (skin ligaments) connecting overlying skin to deep fascia.[7] By anatomical and imaging studies subcutaneous adipofascial tissue has been separated into two parts, a superficial and a deeper compound. The superficial layer forms a solid structure protective

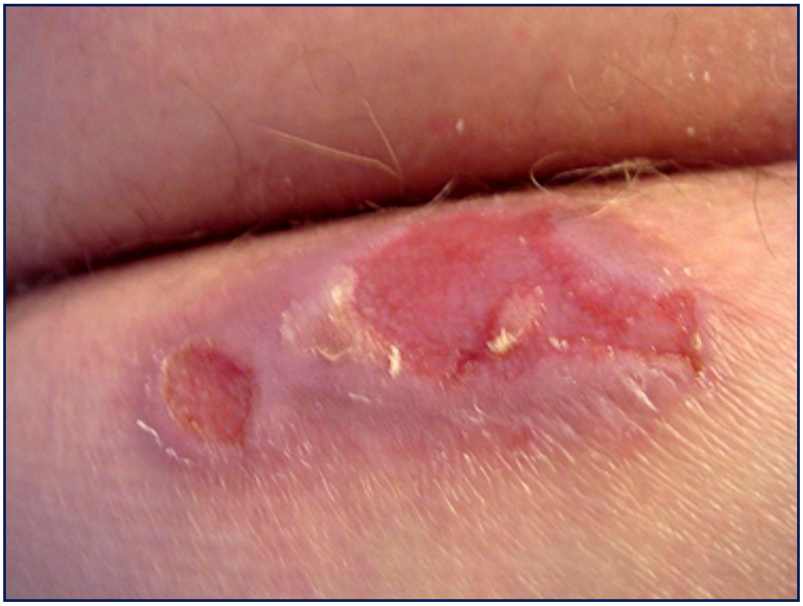

Figure 2

Ulcerated nevus lipomatosis superficialis (Hoffmann-Zurhelle) of the gluteal region (Patient #2).

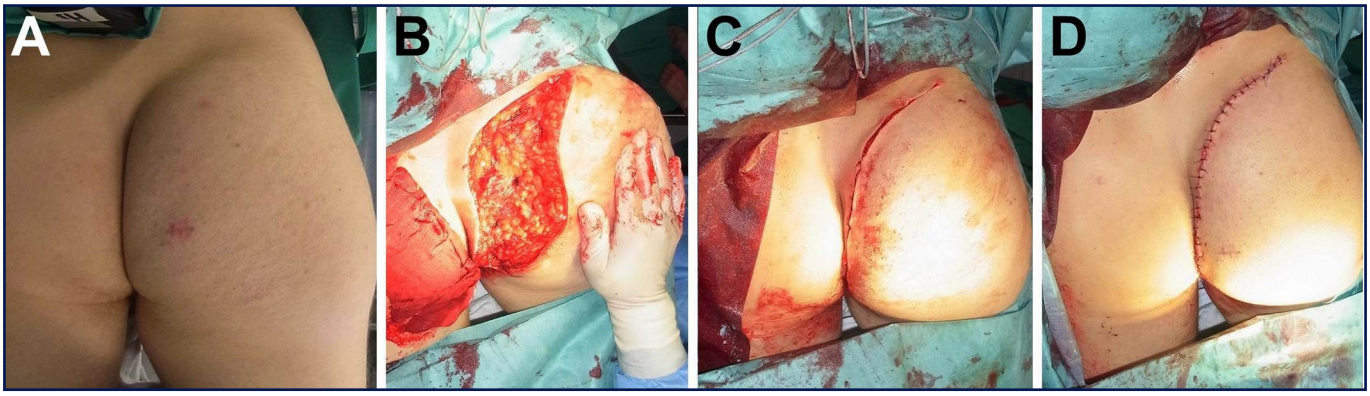

Figure 3

Ipsilateral gluteal hypertrophy associated with nevus lipomatosis superficialis (Hoffmann-Zurhelle) (Patient # 3). (A) Pre-operative situation, scar after diagnostic biopsy; (B) En bloc excision of skin and subkutaneous adipose tissue; (C) Multilayered closure after subcutaneous lipectomy; (D) Skin sutures.

against shear forces and pressure named protective adipofascial system (PAFS). The deep layer is mobile and though to lubricate musculoskeletal movement: lubricant adipofascial system (LAFS).[8]

We performed a lipectomy technique that preserved PAFS and LAFS with minor skin excision to correct unilateral gluteal hypertrophy in patient # 3. The procedure allowed a fast healing process and return to work within 2 weeks. Aesthetics were good and no functional impairment was observed.

Conclusions

Nevus lipomatosus can have a variable clinical presentation with grouped pedunculated skin-colored tumors as the classical type. Surgery remains the cornerstone of treatment.

Acknowledgement

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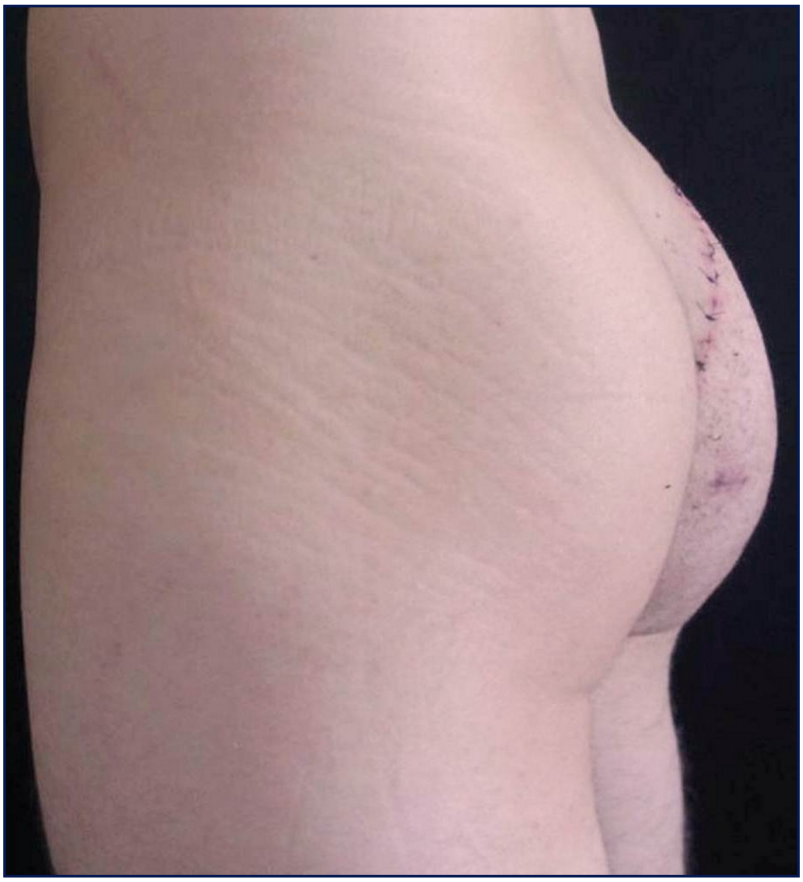

Figure 4

Two weeks after surgery (Patient #3). Lateral view with satisfying aesthetic outcome.

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