Danielle Ferreira Chagas *, Lúcia Martins Diniz, Bruna Anjos Badaró, Elton Almeida Lucas

Dermatology Service, Hospital Universitário Cassiano Antônio Moraes, Vitória, ES, Brazil

* Corresponding author.
E-mail: daaani__@hotmail.com (D.F. Chagas).

Received 12 December 2019; accepted 10 February 2020
Available online 16 August 2020

https://doi.org/10.1016/j.abd.2020.02.014

Dermoscopy of late-onset nevus comedonicus☆,☆☆

Dear Editor,

Nevus comedonicus (NC) is a rare hamartoma of the pilosebaceous unit, a subtype of epidermal nevus first described by Kofmann in 1895.[1] NC manifests with linear or grouped papules and dilated follicular openings with keratotic plugs (resembling comedones) particularly on the face, trunk, and neck; in 50% of cases, it is present at birth, but can also develop during childhood (most commonly before the age of 10 years). The rare presence of skeletal and neurological abnormalities describes the nevus comedonicus syndrome.[2] Histopathology shows keratin-filled invaginations of the epidermis, with absent or rudimentary sebaceous glands. Inflammation and subsequent dermal infiltrate have been described in some cases.[2] Rarely, NC may present in adults;recently Zaniello et al., reporting an additional case of late-onset NC, reviewed the few cases described.[3]

A 72-year-old man with a previous history of stage IB cutaneous melanoma on the trunk in 2013 and prostate carcinoma presented in June 2019 with a keratotic plaque (2×1 cm in diameter) and a small comedo-like nodule (almost 1 cm in diameter) on the left calf, following a Blaschko line (Fig. 1). The lesions had appeared almost 25 years before, and the patient had been asymptomatic until the week before, when the lesions became very itchy. Dermoscopic examination showed a central keratotic plug surrounded by a white structureless area with scales and focal pale structureless red area without clear vessels (Fig. 2). The patient had been taking candesartan, hydrochlorothiazide, bicalutamide, simvastatine, and rabepreazole for years. General physical and neurological examinations were normal, and the patient denied a family history of analogous lesions. Histopathology demonstrated a cyst-dilated follicular opening filled with keratin, slight acanthosis of the epidermis, and hyperkeratosis with ortho- and parakeratosis. The follicular epithelial wall and the epidermis showed EHK with hypereosinophilic keratohyalin granules in the granular cell layer and perinuclear vacuolization (Fig. 3). Sebaceous and eccrine glands were not present. A focal discrete lymphohistiocytic infiltrate was present in the papillary dermis. Upon clinicopathologic correlation, the diagnosis of late-onset NC with EHK was made. The main differential diagnosis was inflammatory linear verrucous epidermal nevus (ILVEN), which typically presents in the first 6 months of life as a pruritic linear eruption on the lower limbs, arranged along the Blaschko lines. At histopathology, ILVEN shows psoriasiform epidermal hyperplasia with parakeratosis, alternating with orthokeratosis. Beneath the orthokeratosis, hypergranulosis is observed, while the parakeratosis overlies areas of agranulosis. Focal mild spongiosis with some exocytosis and even vesiculation may be present, together with a mild perivascular lymphocytic infiltrate in the upper dermis.[3] The infiltrate observed in the present case was probably caused by irritation. EHK is characterized by compact hyperkeratosis with granular and vacuolar degeneration of the cells of the spinous and granular layers. It may be an incidental finding or may be observed in different settings, such as bullous ichthyosis, epidermal nevi variant, palmoplantar keratoderma variant, or disseminated epidermolytic acanthoma.[3]

EHC in a NC has been reported in few cases in the literature reviewed by Zanniello et al.,[3] who reported a peculiar case with late onset (55-year old woman). The present patient is an additional case of this rare histopathological variant of NC.

Dermoscopy of NC was reported in detail for only two young patients. Vora et al. described multiple, well-defined, structureless brown homogenous circular areas surrounding the keratin plugs.[4] Kamińska-Winciorek et al. reported numerous circular and barrel-shaped, homogenous areas in light and dark-brown shades, with remarkable keratin plugs.[5] In the present case, a central keratotic plug was observed, surrounded by a white structureless area with scales and focal pale structureless red area without clear vessels. The following dermoscopic differential diagnoses were considered for the present case: squamous cell carcinoma/keratoacanthoma, which shows an amorphous, yellow-white central mass of keratin, hairpin vessels, and/or serpentine vessels; common wart, which at dermoscopy presents multiple densely packed papillae, with a central red dot or loop, surrounded by a whitish halo; molluscum contagiosum, which displays a central pore in association with polylobular white-to-yellow amorphous structures, surrounded by blurred telangiectasia.

A topical treatment with methylprednisolone aceponate 0.1% for on week and urea 10% ointment twice a day as maintenance therapy was prescribed, with fast improvement of the pruritus and slight decrease of keratotic component.

☆ How to cite this article: Massone C, Javor S, Sola S. Dermoscopy of late-onset nevuscomedonicus. An Bras Dermatol. 2020;95:775–776.

☆☆ Study conducted at the Galliera Hospital, Genoa, Italy.

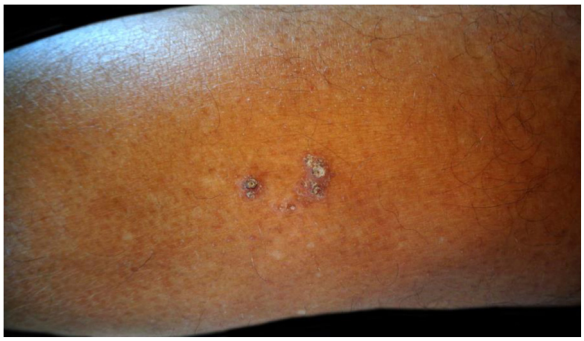

Figure 1 Keratotic plaque and small comedo-like nodule on the left calf following a Blaschko line.

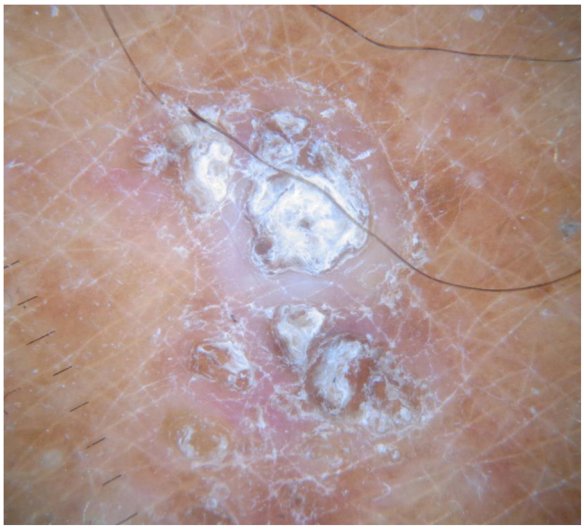

Figure 2 Dermoscopic examination showed a central keratotic plug surrounded by a white structureless area with scales and focal pale structureless red area without clear vessels.

Financial support

None declared.

Authors' contributions

Cesare Massone: Approval of the final version of the manuscript; design and planning of the study; drafting and editing of the manuscript; collection, analysis, and interpretation of data; intellectual participation in the propaedeutic and/or therapeutic conduct of the studied cases; critical review of the literature.

Sanja Javor: Approval of the final version of the manuscript; drafting and editing of the manuscript; collection, analysis, and interpretation of data; critical review of the literature; critical review of the manuscript.

Simona Sola: Approval of the final version of the manuscript; design and planning of the study; drafting and editing of the manuscript; collection, analysis, and interpretation of data; effective participation in research orientation; critical review of the literature; critical review of the manuscript.

Conflicts of interest

None declared.

References

1. Ferrari B, Taliercio V, Restrepo P, Luna P, Abad ME, Larralde M. Nevus comedonicus: a case series. Pediatr Dermatol. 2015;32:216–9.
2. Weedon D. Weedon's skin pathology. 3rd ed London: Churchill Livingstone; 2009.

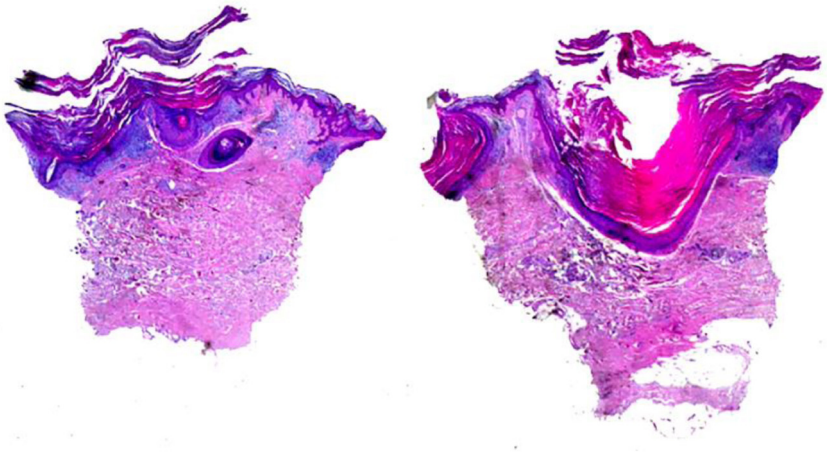

Figure 3 Cyst-dilated follicular opening filled with keratin, slight acanthosis of the epidermis, hyperkeratosis with ortho- and parakeratosis. The epithelial wall and the epidermis showed epidermolytic hyperkeratosis (Hematoxylin & eosin, ×20).

3. Zanniello R, Pilloni L, Conti B, Faa G, Rongioletti F. Late-onset nevus comedonicus with follicular epidermolytic hyperkeratosis-case report and review of the literature. Am J Dermatopathol. 2019;41:453–5.
4. Vora RV, Kota RS, Sheth NK. Dermoscopy of nevus comedonicus. Indian Dermatol Online. 2017;8:388–9.
5. Kamińska-Winciorek G, Spiewak R. Dermoscopy on nevus comedonicus: a case report and review of the literature. Postepy Dermatol Alergol. 2013;30:252–4.

Cesare Massone [a,*], Sanja Javor [a], Simona Sola [a,b]

[a] *Dermatology Unit, Galliera Hospital, Genova, Italy*
[b] *Surgical Pathology, Galliera Hospital, Genova, Italy*

*Corresponding author.
E-mail: cesare.massone@gmail.com (C. Massone).

Received 21 December 2019; accepted 4 March 2020
Available online 14 September 2020

https://doi.org/10.1016/j.abd.2020.03.018

Squamous cell carcinoma superimposed on necrobiosis lipoidica: a rare complication☆,☆☆

Dear Editor,

Necrobiosis lipoidica (NL) is a chronic idiopathic disease, of a granulomatous nature, which affects the dermis. The lesions are characterized by brownish-yellow plaques, and the most common location is the pre-tibial region. It more often affects females (3:1) and appears, in general, from the third decade of life onwards. There is an association with diabetes mellitus (DM), and microangiopathy is considered an etiopathogenic factor for the condition. Ulceration is a common complication, while reports of the onset of squamous cell carcinoma (SCC) in NL lesions are rare.[1,2] After reviewing the literature, 16 cases of SCC in NL lesions were retrieved.[3–5]

A 62-year-old female patient presented an ulcerated, hyperkeratotic lesion in the NL area, on the right leg, about three months prior, with no history of local trauma. She had been diagnosed with NL in the pre-tibial region of both legs ten years before, with no history of recurrent ulceration. The patient had controlled systemic arterial hypertension and type 2 DM. She used oral hypoglycemic agents, with good control in the last years, and did not present retinopathy or diabetic nephropathy. At the physical examination, the patient presented atrophic bilateral plaques on the pre-tibial region and, on her right leg, a small hyperkeratotic ulcerated plaque over a NL lesion (fig. 1). The anatomopathological examination showed a moderately differentiated SCC with invasion of the reticular dermis in an NL lesion (Figs. 2 and 3). No palpable lymphadenomegalies were observed. The SCC was excised and the wound was closed with a graft. The patient evolved well in the immediate and late postoperative period. The anatomopathological examination showed tumor-free margins.

NL is a chronic degenerative disease of the dermal connective tissue characterized clinically by yellowish plaques with a narrow granulomatous border, central atrophy, and a tendency to ulceration, most commonly affecting the pre-tibial region of the lower limbs. It is more frequently observed in diabetic patients and, unlike in the reported, most patients also present mic

The etiology and pathogenesis of NL are uncertain; it is believed that external trauma, primary vascular disorders, and microangiopathy can contribute to its development, regardless of the presence of DM.[1]

The onset of SCC in areas of ulceration and scarring is well documented in a variety of skin diseases. Ulceration is the main complication of NL, observed in a quarter of patients with this disease. However, despite presenting a chronic course and a tendency to ulceration, the onset of SCC in NL lesions has been seldom reported. It is not clear whether the transformation to SCC is the result of chronic ulceration or of long-standing changes in NL. Risk factors that may be involved in malignant transformation include loss of melanin, which facilitates the lesion, chronic inflammation, and hypoxia.[2,3] In the present patient, the neoplasm presented as a new ulceration ten years after the diagnosis of the disease, a long period – similarly to other cases described in the literature. However, unlike others, the present case of SCC on an NL lesion did not have a history of recurrent or intractable ulcers.[3–5]

Metastases have been described in the literature, and may be related to delayed diagnosis (ulcerations are common in NL, delaying the diagnosis of SCC).[5] In the case reported, diagnosis and treatment were performed early; the patient is currently being followed-up and is without lymph node metastases or the appearance of new lesions. To the best of the authors' knowledge, this is the 17th case reported in the international literature.[3–5]

The onset of SCC on a NL lesion is very rare. This possibility should be considered in patients with NL with chronic ulcers, as well as in new lesions in patients with NL. Early detection and treatment of SCC associated with NL is of fundamental importance to allow conservative surgical treatment and the best possible clinical outcome.rovascular complications related to DM, such as nephropathy and retinopathy.

☆ How to cite this article: Souza MEV, Recuero JK, Santos MF, Bonamigo RR. Squamous cell carcinoma superimposed on necrobiosis lipoidica: a rare complication. An Bras Dermatol. 2020;95:777–779.
☆☆ Study conducted at the Dermatology Department, Santa Casa de Misericórdia de Porto Alegre, Porto Alegre, RS, Brazil.