

Squamous Cell Carcinoma Arising from a Nevus Sebaceous (NS) of the Scalp

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ABSTRACT

In adulthood, Nevus Sebaceous is frequently associated with the development of benign and malignant neoplasms and depending on the location and size, the sebaceous nevus can cause aesthetic problems. We report the case of a 52-year-old man who had a Nevus Sebaceous, size 3.0 X 2.8 cm, in the left parietal side that developed a partially hyperkeratotic evolution in few months. The lesion was removed by Mohs-Tubingen surgery and histopathological examination showed an atypical proliferation of the superficial epithelium compatible with squamous cell carcinoma with initial infiltration of the dermis.

CASE REPORT

A 52-year-old male came to us reporting an increase in the roughness of a Nevus Sebaceous reported to be present from the childhood. The clinical examination revealed a triangular Nevus Sebaceous of about 3 cm in diameter in the left parietal side (Figure1) with partial hyperkeratotic surface. The patient had no personal or family history of skin or internal cancers. During the last year the patient has noticed the appearance of an area with greater roughness to the touch, without other symptoms. Clinically we observe a Nevus Sebaceous with an overlapping hyperkeratotic proliferative lesion. The dermoscopic pattern showed yellowish or brown globules aggregated in clusters on a yellow background grayish papillary appearance, whitish-yellow lobular aspect and homogeneous yellowish-grayish appearance without significative vascularisation (Figure 2).

In our experience the dermoscopic vision of squamous cell carcinoma in the keratotic variant poses the difficulty of a differential diagnosis with seborrheic keratoses, actinic keratoses, basal cell carcinoma and verrucous melanoma. An excisional biopsy was performed according to the Mohs Tubingen technique [1]. Microscopically, the lesion showed a mazy proliferation of incompletely formed hair structures connected to an hyperplastic epidermis; dilated apocrine glands were present deep into the dermis (Figure.3). A band-like lymphoid inflammatory infiltrate in close approximation to the epidermis was seen, where budding of rare nests of mildly atypical squamous epithelium were observed (Figure.4). Downward proliferation of acanthotic epidermis with slight nuclear atypia and few mitosis overlaid this area. The histologic features referred to a well differentiated squamous cell carcinoma with subtle stromal invasion arisen in a Jadassohn sebaceous nevus. Enlargement with plastic reconstruction was subsequently performed (Figure 5-7).

An ultrasound scan is scheduled every 3 months for the first 2 years, then every 6 months for the next 3 years.



Figure 1: Triangular sebaceous nevus of about 3 cm in diameter in the left parietal seat , the surface appeared in part hyperkeratotic. (macro 100mm lens).

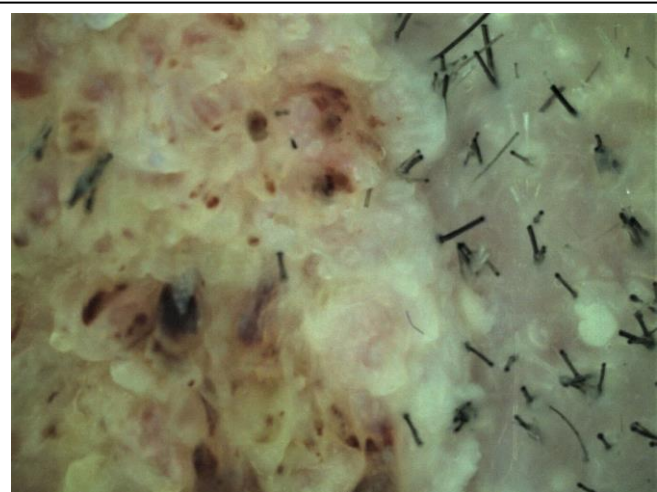


Figure 2: The dermoscopic pattern described yellowish or brown globules aggregated in clusters on a yellow background grayish papillary appearance, whitish-yellow lobular aspect and homogeneous yellowish-grayish appearance without significant vascularization. Magnification 30x – 5 megapixel Dermoscopic Camera.

DISCUSSION

Nevus Sebaceous of Jadassohn, from the name of its first describer, is a hamartoma of the skin and its adnexa, characterized by epidermal, follicular, sebaceous, and apocrine gland abnormalities [2,3]. It may be congenital (0.3% of neonates [4]) or develop in early childhood. Nevus Sebaceous typically appears as a smooth or velvety yellow-orange well-circumscribed plaque. It is localized most frequently on the scalp (59.3%), less often on the face, the preauricular area, or

the neck, and can rarely occur on the trunk or on the oral or genital mucosa [5].

The lesions are often distributed along Blaschko's lines and are arrayed in a linear configuration. The establishment of specific dermoscopic features according to the evolutionary stages of Nevus sebaceous is important for its diagnosis and especially to detect malignant transformation. Basal cell carcinoma is known to be the most frequent malignancy occurring in the Nevus Sebaceous, the occurrence of a SCC on this type of hamartoma is a rare event [6]. In the last 10 years only a few cases have been described in the literature. Dermoscopy is of great help to the dermatologist for the diagnosis of skin cancer lesions. Indispensable in the evaluation of melanocytic lesions it is extremely useful in NMSC diagnostics. The experiences of the last decade have made it possible to extend the application of this diagnostic technique also to non-pigmented skin lesions. Dermoscopy is today particularly effective in the recognition of non-melanocytic skin tumors such as squamous cell carcinoma, basal cell carcinoma and Bowen's disease and other skin neoplasms such as seborrheic keratoses, actinic keratoses, dermatofibroma, clear cell acanthoma. With dermoscopy it is possible to make early diagnosis of the transformation of benign tumors as in the case mentioned.

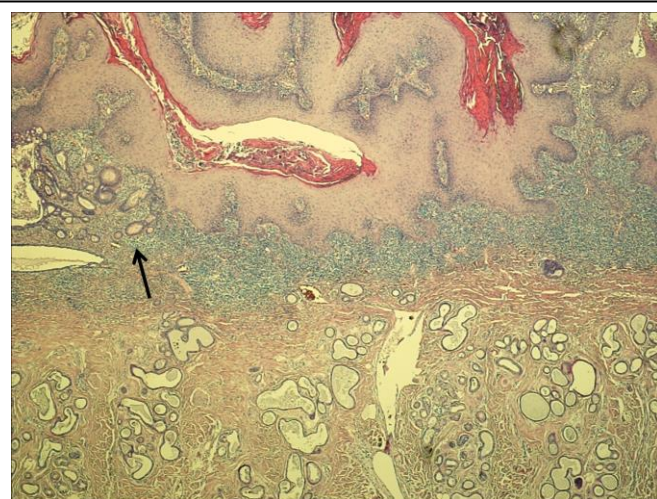


Figure 3: Histological appearance of Jadassohn nevus sebaceous: a reduced number of hair follicles incompletely differentiated (arrow); abnormalities in morphology and in distribution of sebaceous glands and of apocrine dilated glands (at the bottom) (Hematoxylin and Eosin, 4x).

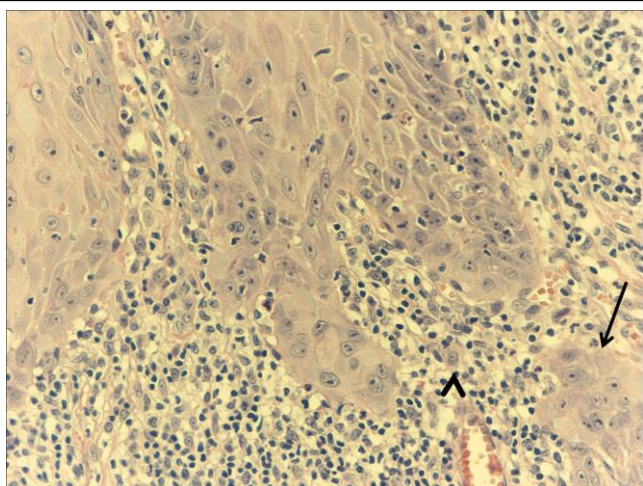


Figure 4: Squamous cell carcinoma infiltration pattern: blunt-type intradermal invasion of atypical epidermal tongues (at the top) with a characteristic club-shaped architecture; isolated (arrow head) or nested (arrow) infiltrative neoplastic squamous cells are also seen. (Hematoxylin and Eosin, 20x).



Figure 5: Widening carved on the edge of the surgical breach.



Figure 6: Sculpting of a flap with creation of an unloading triangle.



Figure 7: Definitive closure of the surgical breach.

Table 1: Clinical case reported in the last 10 Year of squamous cell carcinoma arising Nevus Sebaceus*.

Author	Year	Manuscript	Age	Sex	Reference
Aguayo R et. al.	2010	Case report and Review Lit.	41y	male	[7]
Wu ZW et. al.	2010	Case report	28y	male	[8]
Taher M et. al.	2010	Case report	9y	girl	[9]
Alhumidi A	2013	Case report	80y	male	[10]
Samira Y et. al.	2016	Case report	37y	male	[11]
Locke ST et. al.	2019	Case report	13y	girl	[12]

*2 cases with metastatic localizations are not mentioned.

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