Squamous cell carcinoma and folliculitis decalvans: a case report on this uncommon association

Carcinoma espinocelular e foliculite decalvante: relato de caso dessa rara associação

ABSTRACT

Squamous cell carcinoma is related to exposure to UVB radiation and the presence of chronic cutaneous lesions. Folliculitis decalvans is a cicatricial alopecia that develops with the inflammation of the scalp. In the medical literature, the association between folliculitis decalvans and squamous cell carcinoma is rare, a factor motivating this report. A 66-year-old male patient, bearer of folliculitis decalvans since childhood, complained of progressive growth of lesions in the alopecia area. The biopsy confirmed squamous cell carcinoma. This case report covers the concept of “Marjolin ulcer” for including folliculitis decalvans as inflammatory lesion precursor of squamous cell carcinoma.

Keywords: alopecia; carcinoma, squamous cell; folliculitis

RESUMO

O carcinoma espinocelular relaciona-se à exposição à radiação UVB e à presença de lesões cutâneas crônicas. A foliculite decalvante é alopecia cicatricial que cursa com inflamação do couro cabeludo. Na literatura médica, é rara a associação entre foliculite decalvante e carcinoma espinocelular, o que motivou o relato desse caso. Paciente do sexo masculino, 66 anos, portador de foliculite decalvante desde a infância, queixava-se de lesões de crescimento progressivo sobre a área de alopecia. A biópsia realizada confirmou carcinoma espinocelular. O relato desse caso abrange o conceito de “úlcera de Marjolin” ao incluir a foliculite decalvante como lesão inflamatória precursora de carcinoma espinocelular.

Palavras-chave: alopecia; carcinoma de células escamosas; foliculite
INTRODUCTION

Non-melanoma skin cancer is the most frequent form of cancer in humans – both in men and women. The estimated incidence of non-melanoma cutaneous neoplasias in Brazil in 2014 was 98,420 new cases in men and 83,710 in women. Squamous cell carcinoma (SCC) is the second most common skin cancer and results from the malignant proliferation of keratinocytes. It has an incidence of 100 to 150 per 100,000 inhabitants, and is ten times more common in people over 75-years-old. It is a multifactorial disease and is mainly related to exposure to ultraviolet B radiation (UVB), sunburns in childhood, ionizing radiation, fair skin, genodermatoses, infection with oncogenic strains of human papilloma virus (HPV), immunosuppression, chemical agents, and chronic skin lesions. Folliculitis decalvans (FD) is a rare sub-group of cicatricial alopeicas and presents as a chronic and recurring course. Although the precise cause is unknown, the association with Staphylococcus aureus and immune mechanisms have been postulated in order to justify the related follicular destruction. The classic clinical picture of FD, described by Quinquaud in 1888, is characterized by follicular pustules associated with central cicatrical areas devoid of hair, secondary to aggression by the etiologic agent and/or to pro-inflammatory processes. In the literature, there are few cases of patients with folliculitis decalvans who developed SCC. This rare association motivated the report of the present case.

Case report

A 66-year-old white male patient bearing folliculitis decalvans with histological diagnosis carried out 26 years before at a reference center, described having these lesions since childhood. He had already made use of various treatments with antibiotics, including tetracycline and dapsone, with partial improvement. The patient had not been followed up with for the past 10 years, having returned in April 2014 complaining of lesions with progressive growth in the vertex, over the alopecia area. He could not assert the duration of the development. The dermatological examination revealed a plaque of alopecia in the described region of the scalp, with polytrichia in the periphery. At the center of this area, two lesions could be observed: a circumferential exulceration of about 4 cm with erythematous, scaly edge topped by a hematic crust and nodules of approximately 3 cm with their surfaces covered with a cutaneous horn (Figure 1). With these clinical findings, the diagnosis of SCC over the folliculitis decalvans area was hypothesized. Three biopsies were then performed: one in each of the lesions and another comprising the polytrichia area. The latter evidenced “scalp with dense fibrosis, thinning of hair follicles and lymphocytic infiltrate with suppurative focuses compatible with decalvans folliculitis” (Figure 2), while the others showed SCC (Figure 3). The patient was referred for surgical evaluation and is being followed up with by the service.

DISCUSSION

Malignant transformation in burn scars was first described by Jean-Nicholas Marjolin, in 1828. The term “Marjolin ulcer” is currently used when malignant neoplasms, especially SCC, occur over chronic ulcers, fistulas, and scars of various eti-
REFERENCES


Figure 3: A. Histology of the lesions over the area of alopecia: well-differentiated SCC infiltrating the stroma, and chronic inflammatory process involving the hair follicle (HE – 40X); B. Detail of SCC and chronic inflammatory process involving the hair follicle (HE – 400X)

ologies, including those of an infectious nature, such as leprosy, tuberculosis and lobomycosis. The literature describes a case of a patient with a case of long course folliculitis decalvans who later developed SCC. The constant production of pro-inflammatory cytokines and tissue remodeling in chronic inflammatory disorders provide a favorable environment for malignant transformation. The relative contribution of ultraviolet radiation is difficult to assess. However, it is pertinent to advise the continuous use of photoprotection, as well as to maintain ambulatorial follow up with these patients. Therefore, the emergence of a nodule or ulcer within an area of folliculitis decalvans requires careful clinical evaluation and biopsy when there is a suspicion of neoplasia.