# Exuberant keloid scar associated with skin neoplasia

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## **INTRODUCTION**

Scaring is a complex process that results in the formation of a new tissue for repair of a continuity solution.¹ When there is fibroblast hyperplasia with consequent hyperproduction of collagen fibres, this tissue neoformation becomes elevated and extends laterally in relation to the initial margins of the lesion, characterizing what we called keloid. Additionally, the lesions have variable coloration and continuous or intermittent growth and do not present spontaneous regression, in addition to having a tendency to relapse after drying.²

Chronic scaring process like keloid, resulting from the chronic skin inflamation,<sup>3</sup> are mentioned as predisposing factors for the formation of skin neoplasia, with squamous cell carcinoma and the basal cell carcinoma.<sup>4</sup>

We reported an exuberant keloid scar condition associated to lesions of squamous cell carcinoma and basal cell carcinoma in melanodermic patients.

### **CASE**

68-year old melanodermic male patient sought the dermatology department complaining about scars throughout his body associated with vegetative lesion with progressive growth on the scalp with 5-month evolution and ulcerated lesion on the front thorax with 3-year evolution. During the dermatologic exam, he presented extensive keloid lesions that covered most of his body, especially the torso, upper limbs and scalp (FIGURE 1), in addition to an ulcerous-vegetative lesion with approximately 20 cm in diameter in the right occipital region (FIGURE 2) and ulcerated lesion with high and darkened edges on the left hemithorax (FIGURE 3). He reported that the lesions started in his childhood and since he lives in the rural area, he only had access to healthcare services later on, when lesions were already extensive. He claims they were a result of small traumas such as scratches, cuts, and that some of them appeared without any previous perceptive trauma. Some were previously

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FIGURE 1





FIGURE 2 AND FIGURE 3

treated with corticoid intralesional injection, as well as surgeries, without any improvement, and that they aggravated the scaring process. He denied any previous pathologies and expressed social limitation due to the unaesthetic character of the lesions.

Biopsies done in the scalp and front thorax lesions indicated, respectively, non-invasive ulcerated moderately differentiated squamous cell carcinoma and nodular basal cell carcinoma. The patient was then referred to the reference centre for treatment of neoplasia with surgical approach of the lesions.

# **DISCUSSION**

The scaring of lesions is a dynamic process that leads to the repair or regeneration of tissues in three main phases: inflammatory phase, proliferative phase and remodelling phase. This complex cascade

of physiological events involves the integrated action of different cells, cytokines and extracellular matrix. The keloid scar or simply keloid is a fibroproliferative dermic tumour that develops as a result of alterations in this scaring process.<sup>6</sup>

Lesions can affect all ethnical groups; however, they present preponderance in Africans, Asians and dark-skin individuals in general. The most common places affected are the presternal area, back, posterior cervical region, deltoid region and pinna. The disease has a familiar characteristic with little clarified mechanism; however, a recessive autosomal inheritance has been proposed.¹ Some family syndromes like Rubinstein-Taybi Syndrome, Goeminne Syndrome and Conjunctival-Corneal Dystrophy are associated with exuberant conditions of keloid scars often resulting from small trauma², as presented by our patient. However, he denied having knowledge of

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similar condition in family members, in addition to not presenting characteristics for such syndromes. Other differential diagnostics, like Jorge Lobo disease and paracoccidioidomycosis may also manifest with keloid lesions, vegetative lesions and ulcerations.<sup>8,9</sup> Different from the observed in this case, lesions in the Lacaziosis presented erythematous-greyish colour, smooth and glossy surface with telangiectasia, affecting especially lower limbs and ear pinna<sup>8</sup>. As for the skin form of the paracoccidioidomycosis, it initially manifests in the papulopustulosa form or acneiform, and later on evolves to the ulcerated or ulcerous-vegetative form<sup>9</sup>, a morphologic evolution that was not described in the case presented.

The squamous cell carcinoma, an atypical proliferation of cells from the epidermis spinous layer, is the most frequent skin neoplasia in black people, representing 30% of the cancers. As for the basal cell carcinoma, it is the second skin most fre-

quent cancer on black skin: only about 1.8% of the BCC cases affect black individuals. And among the risk factors, in these cases, are the chronic scaring processes.<sup>4</sup>

Despite numerous studies on the scaring process, no uniting hypothesis properly explains the formation of keloids. The numerous modalities of treatments implemented for handling keloids highlight the poor understanding of their pathogenesis. The therapeutic approach is difficult, and becomes extremely complex in cases of extensive lesions and further associated with neoplasia. As well as in the entire medical area, prevention becomes more important than the treatment itself. However, in the impossibility of preventing all cases, knowing the pathology, its variants, as well as possible neoplasia associated, is necessary for the early decision of the best therapeutic treatment and consequent improvement of the patient's quality of life.

PALAVRAS-CHAVE: Queloide. Cicatriz. Neoplasias cutâneas.

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