

Squamous Cell Carcinoma Arising within Seborrhoeic Keratosis: A Case Report

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Abstract

Objectives: We observe that clinically apparent seborrheic keratoses may be associated with some form of histologically proven skin malignancy. The case represents a 70-year-old male who presented with clinically typical seborrheic keratosis that later histological examination showed partially covered squamous cell carcinoma.

Methods: Clinical information was obtained from the patient's medical records. Five to eight H&E-stained sections were available for evaluation of this case.

Findings: Histopathology of the lesion revealed thickened epidermis with full-thickness dysplasia, hyperchromatic nuclei, and abnormal mitoses with areas of maturation forming parakeratotic horny pearls and individually keratinized cells, confirming the diagnosis of squamous cell carcinoma

Conclusions: The rapid growth or transformation of seborrheic keratosis may be a sign of the appearance of squamous cell carcinoma.

Keywords: Squamous Cell Carcinoma, Seborrhoeic Keratosis

Introduction

Common benign lesions called seborrheic keratoses are infrequently linked to skin cancer. It frequently affects people in their middle years. Infection, UV exposure, and genetics have all been mentioned as potential causes. Both men and women are equally affected. Most often, it just affects the trunk, face, and neck, especially in exposed areas to the sun. The association between SK and skin malignancies appears to be accidental.¹

Histopathological examination of all SK cases should be considered, especially when SK lesions exhibit atypical clinical manifestations, such as ulceration and crusting, as they may be malignant transformations. Usually, they run a benign course but rarely malignancies like basal cell carcinoma (BCC), melanoma and nonmelanoma skin cancers can arise^{1,2}. Herein, we report a case of squamous cell carcinoma arising over a long-standing seborrheic keratosis in a 70-year-old male, which was managed with wide surgical resection.

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Materials and Methods

Squamous Cell Carcinomas of the nose arising from seborrheic keratosis present the basis of this report. Five to eight H&E-stained sections were available for evaluation of this case. Clinical information was obtained from the patient's medical records.

Case Presentation

A 70-year-old man presented with a history of pigmented growth over the nose for the last 25 years. Over the last year, there was the development of a protuberant mass over the lesion. The mass was gradually progressive and was associated with pain and ulceration. The patient was a known non-diabetic and non-hypertensive and gave a history of significant weight loss over the last year. He does not have a drinking or alcohol problem and a family history of cancer. His X-Ray chest showed no abnormality. On gross examination, a well-defined exophytic mass, around 4 cm in diameter, was present over the nose. The surface of the lesion was ulcerated with fissuring (Fig-1). Systemic examination revealed no lymphadenopathy. The patient was advised to complete the excision of the lesion which was later on performed by a surgeon and the lesion was subjected to histopathological examination.

Histopathologic Features

Histopathology of the lesion revealed thickened epidermis with full-thickness dysplasia, multiple horn cyst, and pseudo horn cysts noted in low power view. At higher magnification, hyperchromatic nuclei, abnormal mitoses with areas of maturation forming parakeratotic horny pearls and, individually keratinized cells, confirming the

diagnosis of well-differentiated invasive squamous cell carcinoma. (Fig-2A, 2B & 2C)

Discussion

Seborrheic keratosis the most common benign tumor of the skin, commonly seen among the elderly and the middle-aged.¹ These common lesions can be located anywhere on the skin, but not on the mucous membranes.² A large number of individuals will present at least one such lesion during their lifetime. The lesions initially present as flat, well-demarcated brown macules that gradually become greasy papules with a verruca-like surface and that appear to be stuck to the skin. They are usually located bilaterally and symmetrically, mainly on the face, body, and limbs, and they may manifest in a Christmas tree pattern when several are present on the body.² Their color ranges from light brown with areas of pink, dark brown, or black, to white as seen in stucco keratosis.² The etiology of seborrheic keratosis is unknown but has been suggested to include genetic predisposition, sunlight exposure, human papillomavirus, and hyperplasia of melanocytes, although none of these factors is considered to be the sole cause of seborrheic keratoses. Moreover, no apparent relationship exists between manifestations of such lesions, skin type, and/or localization of lesions on exposed and unexposed skin.^{2,3}

According to certain theories, the three types of cells that make up seborrheic keratosis play a role in the development of the various malignant neoplasms of the skin. Specifically, basal cell carcinoma, squamous cell carcinoma, and malignant melanoma all develop from melanocytes.^{3,4}

In 1932, there was the first suggestion of a connection between seborrheic keratoses and cancerous skin neoplasms.⁴ Since then, particularly in the last few years, numerous research has attempted to prove such a connection. Many publications acknowledge the uncommon conjunction of seborrheic keratosis and skin cancer.



Figure 1: Gross picture

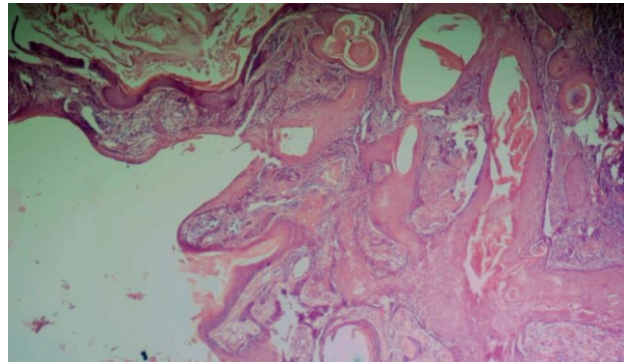


Figure 2 (A): Multiple horn cysts and pseudo horn cysts. (Low power view)

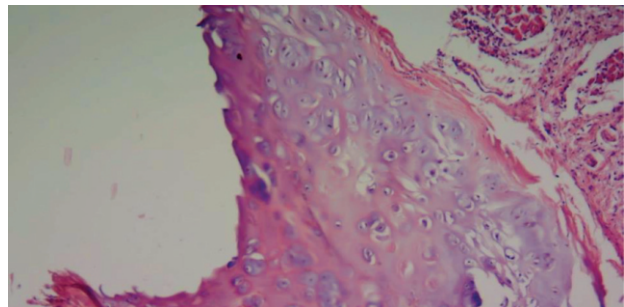


Figure 2 (B): Low power view

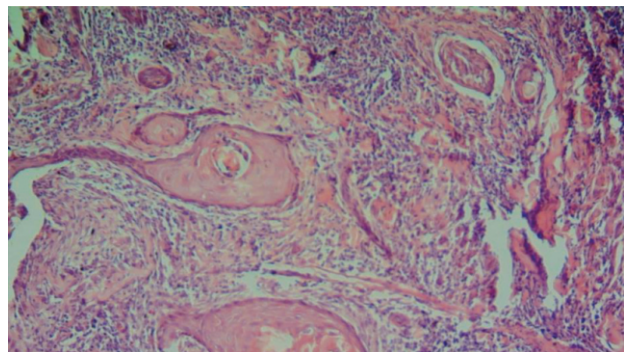


Figure 2 (C): Section showed well-differentiated invasive squamous cell carcinoma. (High power view)

Conclusion

Early detection and complete surgical resection are important for long-term survival. This report highlights the rare but potentially life-threatening risk of malignant transformation of SKs. We emphasize that not all lesions of seborrheic keratosis undergo malignant transformation. Therefore, histopathological examination is not necessary in all cases of seborrheic keratosis. The clinicians should be well aware of the risk and a timely biopsy of suspicious lesions of SK should be performed.

Conflict of Interest: Nil

References

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