

Invasive Squamous-Cell Carcinoma of the Scalp

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Abstract

Squamous Cell Carcinoma (SCC) is an epithelial neoplasm arising from the malignant proliferation of keratinocytes and it is the second most common type of skin cancer behind basal cell carcinoma (BCC). SCC presents with a wide variety of clinical manifestations including erythematous patches and nodules although its most usual presentation includes indurated well demarcated ulcerative lesions. We present historical case of SCC of the scalp who made the extension and invasion the brain after eroding the vault.

Keywords: Squamous cell carcinoma, malignancy, dura, scalp.

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INTRODUCTION

Squamous cell carcinoma (SCC), also known as squamous cell epithelioma or spinalioma, is an epithelial neoplasm arising from the malignant proliferation of keratinocytes and it is the second most common type of skin cancer behind basal cell carcinoma (BCC). SCC presents with a wide variety of clinical manifestations including erythematous patches and nodules although its most usual presentation includes indurated well demarcated ulcerative lesions. The risk for distant metastases ranges between 1-5% up to 30-60% when located in the perineal region in its ulcerative form, hence the relevance of early diagnosis. Afterward, we will report a case of SCC on the scalp of a patient with known predisposing factors.

CASE PRESENTATION

A 66-year-old man presented to our hospital with an ulcerated lesion on the scalp evolving for four

years. Approximately 15 years earlier, he had been treated with radiation therapy for craniopharyngioma. The patient had received a total dose of 50 Gy of radiation to the skull. Ten years after the radiation treatment, he first noted a small infiltrated nodule on the scalp, but he did not present for care until the lesion began to ulcerate, approximately 18 months later. On physical examination, he had an infected ulcerated lesion of the whole scalp eroding the cranial vault (Figure 1). Biopsy revealed invasive squamous-cell carcinoma, as well as findings consistent with chronic radiation-induced dermatitis; lymph-node biopsy confirmed the presence of metastatic disease. Radiation-induced squamous-cell carcinoma can appear decades after exposure to ionizing radiation. Radiation therapy is no longer commonly used for the treatment of hyperhidrosis. The patient underwent local care and chemotherapy, but he died three months after diagnosis from complications of metastatic disease.



Figure 1: Clinical finding and Radiological aspect of the patient showing the invasive lesion of the scalp

DISCUSSION

As it has been previously stated, SCC is a malignant invasive neoplasm which can potentially present with distant metastases, usually developed on areas with solar keratosis or previous lesions [3]. In over 80% of cases it is developed on sun-exposed skin areas such as head, face, neck, back, hands and usually on areas with actinic keratosis [4]. SCC typically affects males (2:1 if compared to women) and older fair-skinned individuals (skin types I and II) who work outdoors [1, 2]. It has a very high incidence (774/100 000 in the general population) and its diagnosis must always be considered when evaluating skin and mucous lesions even if they do not match the most common etopathogenetic factors or the most usual epidemiological features, as it has been observed in this case. In fact, the existence of clinically atypical forms of SCC has been described and the need for early diagnosis and treatment has been emphasized [5].

Finally, we must take into account that skin cancer is a preventable condition, both by means of changes in lifestyle and by the early detection of precancerous skin lesions-conditions which entail the malignant transformation of skin cells. Basic prevention measures taken by Primary Care teams should include: a) health education on appropriate sun exposure; b) protection and hygiene measures that should be taken when developing potentially cancerous activities; c)

observation and suspicion of lesions in patients with scars, ulcers, lichen sclerosus et atrophicus, mucous lichen planus, senile skin atrophy or infection by HPV.

Conflict of interest for all authors: None

REFERENCES

1. Malvezzi, M., Bertuccio, P., Levi, F., La Vecchia, C., & Negri, E. (2013). European cancer mortality predictions for the year 2013. *Annals of oncology*, 24(3), 792-800.
2. Centros para el Control y la Prevención de enfermedades (CDC) [Internet]. Atlanta: CDC; c1995- 2014 [actualizada 2013 Oct 23; citada 2014 En 14]. Estadísticas de cáncer de piel; [sobre 1 pantalla]. Disponible en: <http://www.cdc.gov/spanish/cancer/skin/statistics/>
3. Yu, R. C. H., Pryce, D. W., Macfarlane, A. W., & Stewart, T. W. (1991). A histopathological study of 643 cutaneous horns. *British Journal of Dermatology*, 124(5), 449-452.
4. Diepgen, T. L., & Mahler, V. (2002). The epidemiology of skin cancer. *Br J Dermatol*, 146(Suppl 61), 1-6.
5. Muñoz Pérez, M. Á., Escudero, J., Camacho, F., Rojo, J., & Vera, I. (2001). Carcinoma espinocelular agresivo con presentación atípica. *Actas dermo-sifiliogr. (Ed. impr.)*, 39-40.