Squamous cell carcinoma of the eyelid developing on a cutaneous lichen planus lesion

Roberto Cuomo,¹ Luca Grimaldi,¹ Giuseppe Nisi,¹ Irene Zerini,¹ Andrea Sisti,¹ Aurora Barone,² Clelia Miracco,³ Carlo D'Aniello¹

¹General and Specialistic Surgery Department, Plastic Surgery Division, University of Siena; ²Department of Medical Biotechnologies, Section of Pathology, University of Siena; ³Department of Human Pathology and Oncology, Pathological Anatomy Section, University of Siena, Italy

Abstract. Squamous cell carcinoma is the second most common malignant tumor of skin. We present a case of a 67 years-old patient with a squamous cell carcinoma developing on a cutaneous lichen planus lesion, located on his right upper eyelid.

Key words: Carcinoma, Squamous Cell, Eyelid Neoplasms, Lichen Planus.

CASE REPORT

Squamous cell carcinoma (SCC) is the second most common malignant tumor of skin [1]. Approximately, 5% of skin tumors occur in the eyelids. The incidence of the disease is higher in men over 40 years of age, basal cell carcinoma being observed more frequently than the squamous cell type. The incidence of eyelid skin tumors is mostly a result of environmental factors including sunlight and ultra violet exposure and genetic factors including skin pigmentation. The different incidence of eyelid cancers among countries may be because of variations in skin types, geographical latitudes and health behaviour [2]. Clinically neglected, advanced SCC of the eyelid can have devastating outcome [3].

We present a case of a 67 years-old patient with a tumor, located on his right upper eyelid (Figure 1). He also had two suspicious growths on his front and scalp. The protrusion of the eyelid's tumor prevented the perfect closing of the eyelids. This lesion has been present for about six months, at the time of the first visit.

The patient had no history of immunosuppression. The patient's medical history includes the removal of other 3 squamous cell carcinomas localized to the head, the chest and the shoulder, over the past 13 years. He also reported, as a risk factor, prolonged sun exposure during 40-year employment as construction worker. Cancer of the right upper eyelid was excised, along with two suspicious growths of the head, during the same operation. The eyelid's epithelium was immediately reconstructed using auto transplantation with autologous retroauricular graft.

Other surgical wounds were closed with simple ad-

vancement flaps. The final clinical result was satisfactory (Figure 2).

Histological diagnosis of the tumor localized to the eyelid (Figure 3) was acantholytic squamous cell carcinoma infiltrating the reticular dermis, on the background of lichen planus (LP), while the histological report of the other two growths in front and scalp was actinic keratosis lichenoides. To the best of our knowledge, this is the first case of squamous cell carcinoma of the eyelid insurgent on lichen planus.

The patient's history was silent with regard to the presence of lichen planus in himself or his family. Physical examination showed no presence of lichenoid lesions on the skin nor in the oral cavity nor on the scalp.

The patient had a postoperative course without complications or recurrences. After two months of follow up, the patient was very pleased with the result.

Malignant transformation of LP is a controversial subject with much conflicting evidence. Clinically, hypertrophic lichen planus can mimic squamous cell carcinoma [4]; infiltration into deep dermis and invasion of blood vessels and nerves, are features more suggestive of SCC. Sometimes, direct immunofluorescence may help in the differential diagnosis.

Studies suggest an estimated 0.3-3% risk of malignancy in patients with oral lichen planus; squamous cell carcinoma can also arise on cicatricial alopecia due to lichen planopilaris [5]. However, cutaneous lichen planus does not carry an increased risk of malignant degeneration.

In our patient, SCC aroused on a LP skin lesion. Few studies have described the occurrence of squamous cell carcinomas from longstanding, non-healing, lesions of cutaneous lichen planus [6].

Department of General and Specialistic Surgery, Plastic Surgery Unit, "Santa Maria alle Scotte" Hospital, University of Siena Viale Bracci n.1, 53100 Siena, Italy. Tel./Fax: +39.0577.585158

E-mail: robertocuomo@outlook.com

Correspondence to:

Roberto Cuomo



Figure 1. Eyelid squamous cell carcinoma on lichen planus.



Figure 2. This picture was made 18 days after surgical resection and simultaneous reconstruction with retroauricular graft.

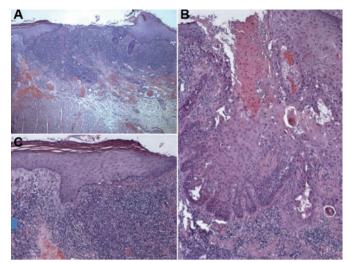


Figure 3. At scanning power, an ulcerate; microinvasive squamous cell carcinoma is observable nearby a lichenoid dermatitis (A). In another area, the SCC infiltrates the reticular dermis (B). At higher power, features of a lichen planus are evident (ortokeratotic, hyperkeratosis, hypergranulosis, band-like, subepidermal inflammatory infiltrate) (C). Hematoxylin & Eosin, Original Magnification: A) 25×; B) 25×; C) 50×.

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