



Actinic Cheilitis

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Actinic cheilitis is a potentially malignant disorder of the lip semi-mucosa, particularly of the lower lip, closely related to chronic and excessive exposure to ultraviolet radiation. For this reason, it mainly affects the lower lip of people with light skin

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color and aged over 40 years, with a history of prolonged sun exposure, usually occupational, such as rural workers, truck drivers, and fishermen. Countries with tropical climates and a population of light-skinned immigrants, of European descent, like many countries on the Pan-American continent, present a higher number of cases.

Similar to other oral potentially malignant lesions, one or several biopsies are essential to define the degree of dysplasia and possible areas of incipient squamous cell carcinoma. In any case, it is estimated that approximately 10–20% of cases of actinic cheilitis develop into squamous cell carcinoma, in which they almost always present areas of associated actinic cheilitis.

Clinically, actinic cheilitis may range from white plaques affecting part or a large extent of the lip to erythematous areas. It also leads to the loss of sharpness of the lip (semi-mucosa) and skin border. Management implies strict follow-up. Laser resection of the vermilion of the lip or surgical resection may be indicated in cases with exuberant and recalcitrant disease.

1 Clinical Characteristics

- Actinic cheilitis is characterized by a heterogeneous clinical presentation, which may present mainly loss of delimitation between the skin and lip semi-mucosa (i.e., loss of sharpness of the lip and skin borders); atrophy; dryness; white plaques affecting part or great extension of the lip, erythematous areas, hyperpigmented and hypopigmented areas; and edema (Figs. 1, 2, 3, 4 and 5).
- They can be localized or diffuse.
- Hyperpigmented areas, crusts, fissures, and ulcers may be associated.
- It is relevant that most squamous cell carcinomas in the vermilion of the lip appear to favor the side where patients keep their cigarets while smoking (generating a synergistic effect on photo-carcinogenesis).

Fig. 1 Patient with actinic cheilitis presenting an undefined margin between the vermilion of the lip and the skin



Fig. 2 Diffuse irregular white plaque in the vermillion of the lower lip



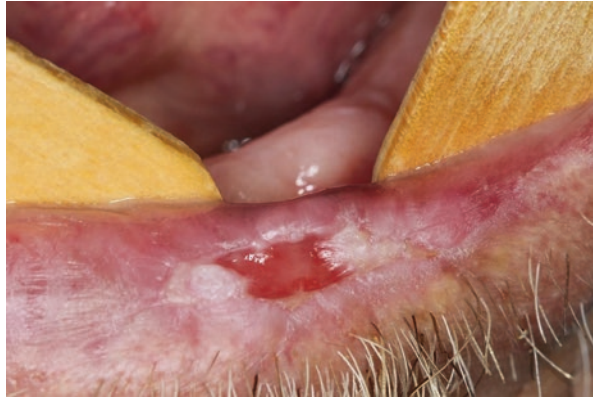
Fig. 3 Ulcerated lesion in a patient presenting actinic cheilitis



Fig. 4 Actinic cheilitis causing edema of the vermillion border of the lower lip, presenting crusts and ulcerated areas. The histopathological examination showed squamous cell carcinoma



Fig. 5 Actinic cheilitis with erosion on the lower lip. Histopathological examination showed squamous cell carcinoma



2 Diagnosis

- The diagnosis is based on the association of clinical-demographic characteristics.
- Areas of recurrent ulceration, erosions, white plaques, and induration are signs that may indicate epithelial dysplasia or malignant transformation, and biopsy is indicated in these cases.
- The heterogeneity of the clinical presentation of actinic cheilitis can make it difficult to choose the region to be biopsied. In some cases, it may be necessary to choose more than one region.
- The utilization of alternative noninvasive diagnostic methods, such as the observation of tissue autofluorescence, seems to aid in the identification of regions with a higher probability of presenting tissue alterations with malignant potential.

3 Treatment

- Orientation regarding protection from the sun's rays, such as the use of a hat with a brim and continuous use of lip sun protection factor (SPF) 30.
- Surgical excision of areas with clinical features indicative of epithelial dysplasia.
- Photodynamic therapy.
- Laser resection of the vermilion of the lip or surgical resection may be indicated in cases with exuberant lesions.
- The patient with actinic cheilitis should be referred to a dermatologist due to the risk of developing skin lesions also resulting from sun exposure.
- For night hydration, indicate the vitamin B5 formula (dexpanthenol), lanolin and almond oil manipulated, or commercial as Bepantol ointment (50 mg/g tube with 30 g).
- Management implies strict follow-up, with periodic patient education, and clinical follow-up for a better prognosis of the case.

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