

# An Aggressive Basal Cell Carcinoma of the Lower Lip: A New Case Report

Mrabat Samia\*, Baybay Hanane, Laamari Kaoutar, Douhi Zakia, Elloudi Sara, Mernissi Fatima Zahra  
Department of Dermatology, University Hospital Hassan II, FES, Morocco

\*Corresponding author: Mrabat Samia  
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## Abstract

The labial mucosa is an unusual site for basal cell carcinoma. Only a few cases have been reported in the literature. We present a case of basal cell carcinoma which involved the vermilion of the lower lip. A 77-year-old man presented with an ulcer taking half of his lower lip and extending to the skin evolving for two years. There were no cervical lymph nodes. Diagnosis of infiltrative basal cell carcinoma was made by histological study which showed a tumoral proliferation starting from epidermal basal layers infiltrating the hypodermis with perineural infiltration. The pathogenesis of basal cell carcinoma of the vermilion lip is not clear. While basal cell carcinoma originates from pilar structures, the lack of pilosebaceous follicles in the normal lip mucosa has led to several hypotheses to explain the pathogenesis of mucosal basal cell carcinoma. Our case shows a very rare location of basal cell carcinoma. The ulcer that originally started in the vermilion, has extended and reached the mucosa and the skin areas. Therefore, basal cell carcinoma should be considered among the differential diagnosis of ulcerative lesions of the lip.

**Keywords:** Basal cell carcinoma, lip cancer, ulcer, oral mucosa, vermilion.

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## INTRODUCTION

Basal cell carcinomas (BCC) are derived from keratinocytes arising from the basal layer of the epidermis [1, 2]. Although they are generally slow-growing and rarely metastasize, they can be locally invasive and if left untreated, may destroy surrounding tissue and be highly disfiguring [3, 4].

BCCs usually occur on sun-exposed areas; UV radiation, specifically UV-B [5-7]. While the majority of BCCs are found on the skin, some rare cases of mucosal BCCs (mBCCs) have been reported. We report the case of a BCC occurring on the vermilion of the lower lip.

## CASE REPORT

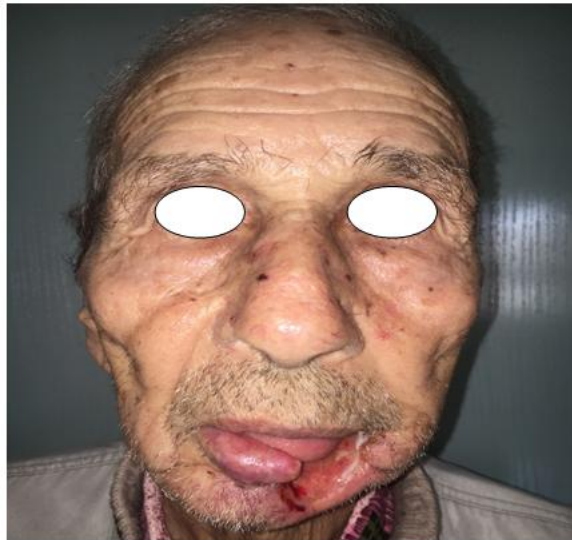
A 77-year-old man with a previous history of surgical excision of a squamous cell carcinoma of the ear, presented with an asymptomatic ulcer of the lower lip that had progressively grown during the last two years. On physical examination, we observed a well defined ulcer taking half of the lower lip and extending to the chin's skin with some bleeding. Dermoscopy showed telangiectatic and arborescent vessels. There were no cervical lymph nodes. Skin biopsy found a tumoral proliferation starting from the epidermal basal layer reaching in depth the hypodermis. Tumor cells

showed the characteristic peripheral palisade. There was a perineural infiltration with an inflammatory infiltrate. Therefore, the histological data confirmed the diagnosis of infiltrative BCC of the lower lip.

## DISCUSSION

Epithelium of the lip contains four regions: the skin, the vermilion border, the outer mucosa (vermilion), and the inner mucosa [8, 9]. Because BCCs have typically been thought to originate from pilar structures [10, 11]. The lack of hair follicles and sweat glands in the vermilion lip and oral mucosa challenges this theory in regard to mBCCs development [12, 13]. Several hypotheses have been proposed, such as an origin related to pluripotential epithelial cells, traumatic epithelial implantation, migration of pilosebaceous units from the skin to the vermilion, or the presence of ectopic sebaceous glands [8, 9]. Clinically, mBCCs on the lip often present as ulcerated, bleeding, or crusted lesions, which may resemble herpes simplex presentation [8]. In our case, it presented with a bleeding ulcer. In that location, BCC seems to initiate at the vermilion border, invading later the remaining vermilion [8]. The inner mucosa might be subsequently affected [8]. An early invasion of deeper structures could be explained by the thin submucosal layer of the lips [8].

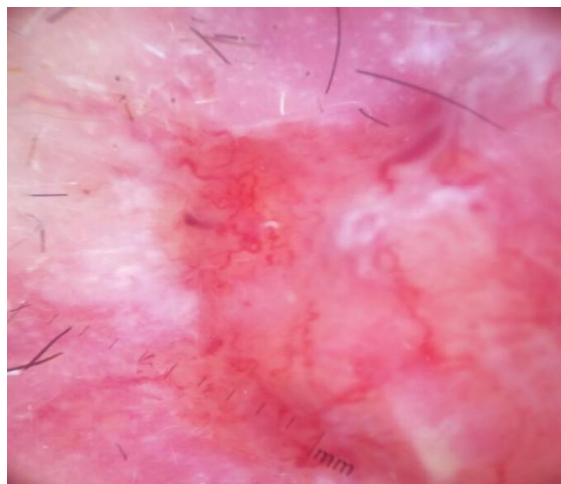
## Iconography



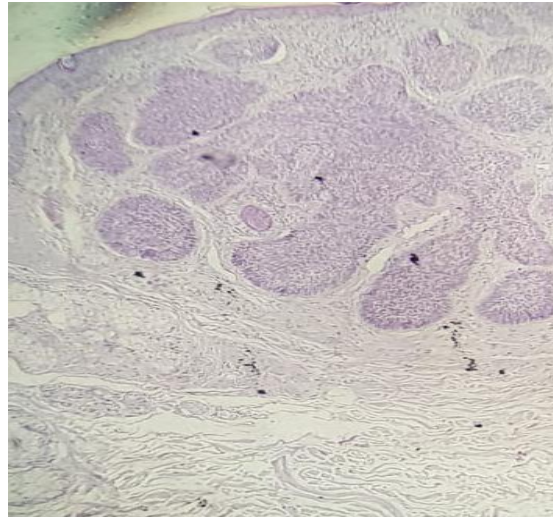
**Fig-1: A well defined ulcer taking half the lower lip and extending to the chin**



**Fig-2: A well defined ulcer taking half the lower lip and extending to the chin**



**Fig-3: Dermoscopy showing arborizing and telangiectatic vessels, bleeding and ulceration**



**Fig-4: Histologic picture showing a tumoral proliferation starting from the epidermal basal layer reaching in depth the hypodermis**

## CONCLUSION

In summary, our case aims to point out that BCC should be included in the causes of lesions occurring on the vermilion of the lower lip. Although mucosal basal cell carcinoma is rare, it can quickly invade the underlying structures. Therefore, it should be diagnosed and be treated early.

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