

Squamous Cell Carcinoma of the Lower Lip in an Old Black African Woman

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Abstract: Squamous cell carcinoma (SCC) of the lower lip is the most frequent cancer of the oral cavity in the elderly. The potential etiologic factors are pipe-smoking, tobacco-chewing and chronic alcohol consumption. They grow slowly and are easily diagnosed. But, they can lead to functional, esthetical complications and to death when diagnosed and treated lately. Here, we report a case of SCC of the lower lip in a black woman aged of 82 year-old evolving for 10 years, associated with tobacco use for over 40 years. The clinical examination noted: a large, bourgeoning and ulcerated tumor covering the 2/3 part of the lower lip with irregular raised indurate borders which bleed when traumatized, without regional lymph node and distant metastasis. The patient was treated by wide surgical excision associated with V to Y advancement flap added to nasolabial island flap, and healed within 4 weeks, with good aesthetic and functional results without any recurrences after 2 years follow up time. The late diagnosis of SCC makes its treatment difficult and expensive in limited resource countries like Côte d'Ivoire. Therefore, it is necessary to set up a preventive strategy to detect the disease in its initial stage to promptly institute effective and efficient care.

Keywords: Lip squamous cell carcinoma, Surgical treatment, Local flaps.

1. INTRODUCTION

While the incidence of lip cancers is low (1-2%), they are extremely important from a clinical and surgical point of view because of the morphological and functional changes involved. Over 90% of these tumors consist of squamous cell carcinomas (SCCs) and, in lesser numbers, basal-cell carcinomas [1]. Cancer of the lower lip is also the most frequent cancer of the oral cavity in the elderly [1]. The etiologic factors are mainly longterm sunshine exposure, pipe-smoking, tobacco-chewing and chronic alcohol consumption [1,2]. Lip carcinoma involves the lower lip in 91 to 97% of cases, and the vast majority is squamous cell carcinomas [3]. They are not perceived as aggressive carcinomas since they grow slowly, are easily diagnosed. But they can lead to functional, esthetic complication and to death when diagnosed and treated lately or left untreated [2,4]. Here, we report a case of squamous cell carcinoma of the lower lip in elderly.

2. CASE REPORT

It was a female patient aged of 82 year-old, who consulted at the department of dermatology for bourgeoning and ulcerated tumor of the lower lip evolving

for 10 years. Patient disease history taken revealed that she used tobacco for over 40 years. The disease occurred on an infiltrated plaque on the white lower lip associated with chronic chelitis. The lesion evolved for about 8 years without pain and pruritus. Two years later, the lesion extended over its initial site, became eroded and painful. The patient applied some traditional mixtures on the tumor without success. The tumor became large, ulcerated and bleeding in contact or when traumatized. Front of this ulcerated lower lip mass, the patient decided to consult at the dermatology department for proper management.

The clinical examination noted: a large, bourgeoning and ulcerated tumor covering the 2/3 part of the lower lip with irregular raised indurate borders which bleed in contact or when traumatized (Figure 1).

The tumor measured about 8 centimeters (cm) as widest diameter reaching the mucosa of the oral cavity. We did not find any lymph node. The rest of the oral cavity examination was normal. The histopathological examination of the tumor after surgical excision-biopsy confirmed the diagnosis of squamous cell carcinoma. Blood check including HIV test did not revealed any abnormality. Thoracic and cranial X-ray, PT and CT scan did not find any regional and distant metastasis. Laryngoscopy and esophagoscopy were performed to exclude a simultaneous second primary cancer. Polymerase chain reaction (PCR) for HPV infection was also negative. Our patient was put in stage 2 of TNM classification.

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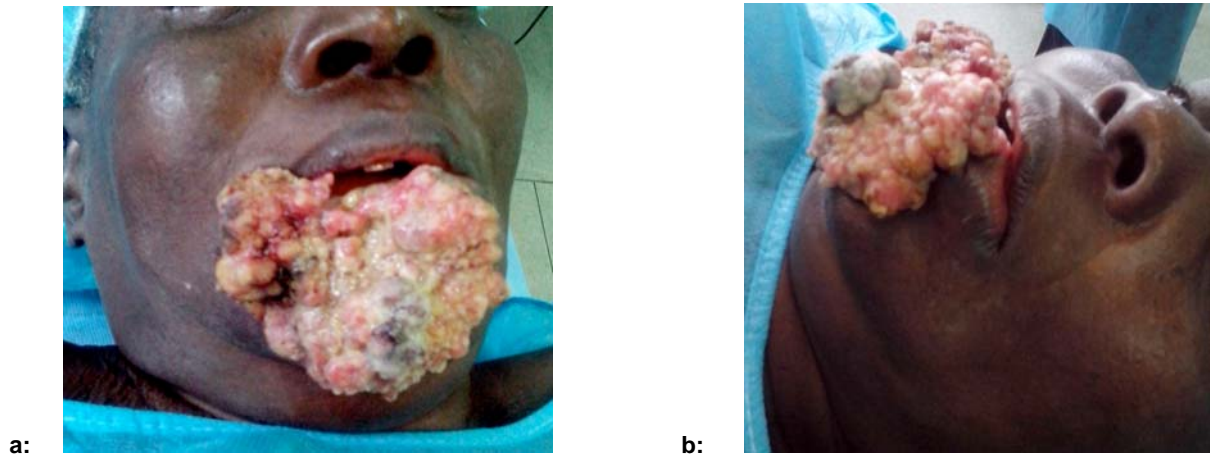


Figure 1: Squamous cell carcinoma of the lower lip in black woman aged of 82 year-old. **a:** frontal view; **b:** lateral view.

The patient was treated by surgical excision associated with V to Y advancement flap added to nasolabial island flap in two steps. In first step; surgical resection of the tumor with tumor free margins of 2 cm was performed (Figure 2a). In second step, the surgical defect was covered using a double V to Y advancement flap² added to nasolabial island flap¹ due to the width of the defect (Figure 2b). The nasolabial skin flap¹ is elevated first from the superior to the inferior. At the inferior end a cuff of tissue surrounding vessels is dissected. Then, V to Y advancement flaps² was designed in both sides from cheek and from chin and they were advanced into the lower lip as donor site were closed.

The patient recovered within 4 weeks after surgery, with good short- and long-term aesthetic and functional results without any recurrences after 2 years follow up time (Figure 3).

3. DISCUSSION

3.1. Epidemiology

Most of the patients with lower lip squamous cell carcinoma (SCC) are elderly, male and in stages I-II [2]. Man are more affected by SCC than woman because more men are indulge in high risk habits. These etiologic factors are mainly pipe-smoking, tobacco-chewing and chronic alcohol consumption [1,2]. The lip SCC can arise from pre-existing potentially malignant disorders including, erythroplakia, submucous chronic dysplasia or lip leukoplakia as we observed in our case or can arise de novo [2,3]. In fact, our patient used tobacco for a long time and presented a chronic chelitis and infiltrated plaque on which the tumor appeared. In addition, mutagenic effects of tobacco depend upon dose, upon frequency and the duration of the use [5]. This was ob-

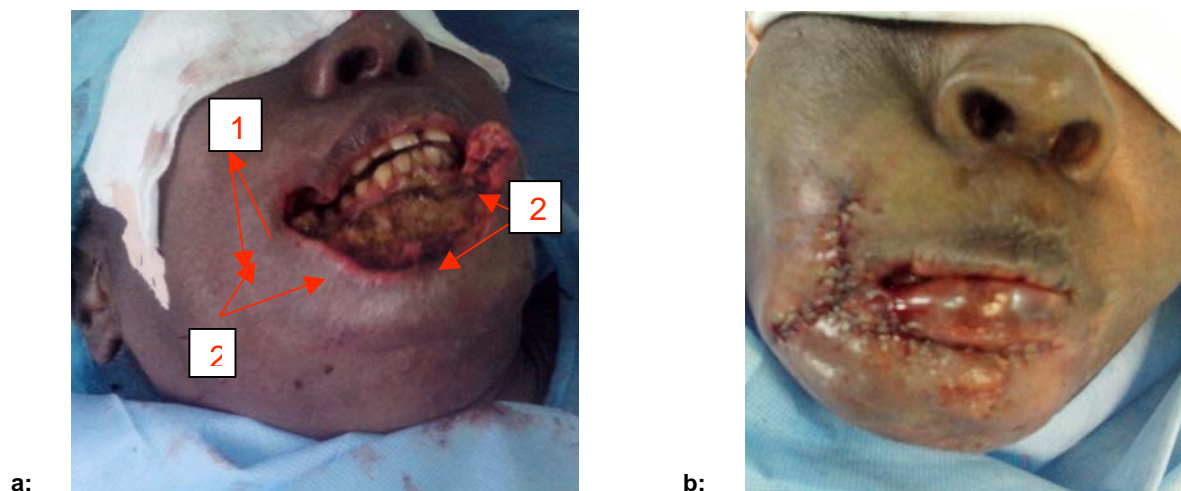


Figure 2: **a:** Surgical defect after wide excision of the squamous cell carcinoma of the lip with tumor free margins of 2 cm. **b:** V to Y flap advancement² added to nasolabial island flap¹ for defect covering.



Figure 3: SCC of the lower lip in old woman after surgical excision and V to Y flap advancement added to nasolabial island flap, after 2 years follow up.

served in our patient who used tobacco for about 42 years.

3.2. Diagnosis

The ignorance of our patient could explain the delay of tumor diagnosis and the wide diameter of the tumor. Moreover, lips SCC are sometimes asymptomatic initially, slow growth and easily diagnosed [3]. The diagnosis is confirmed by the histopathological examination of the tumor biopsy; followed by tumor staging, which allows proper treatment [3]. So, oral screening by health practitioners should make a point, whenever possible of examining the mouth as part of general examination in patient aged of more than 50 year-old and in particular in elderly for early tumor detection [5].

3.3. Treatment

The primary aim of treatment always being to eradicate the SCC, to prevent recurrence, and insofar as is possible to restore the form and function of the affected part [5].

The most commonly employed treatments include surgery, radiotherapy and cryotherapy (freezing with liquid nitrogen), with cure rates for early lesions nearing 100 percent [3]. This treatment is planned, as appropriate, on the basis of the characteristics of the tumor [3].

Surgery the mostly used for lip cancer needs to be organized bearing in mind the site and extent of the incision, in order to allow the best possible reconstruction, avoiding scarring that could lead to undesired morphological and functional damage. Numerous techniques have been developed for lip reconstruction [1]. In their series Moretti et al, used different surgical techniques

adapted in each case, in relation to the site, size and stage of the tumours; 13 removals were performed with a wedge or "W" shaped excision followed by direct closure, while 18 were carried out, as required, according to tumour extent, followed by repair performed primarily with the use of loco-regional flaps. In the 18 patients, the local flaps used to restore the continuity of the lip were as follows: 4 Sabattini-Abbé flaps, 6 naso-labial flaps performed in patients with white upper and lower lip involvement, 5 Estlander flaps in cancer of the commissural area and in 3 patients other flaps [1]. Surgical excision should be performed with tumor free margins not less than 5 mm, in order to avoid recurrence, as done in our case, sometime added to radiotherapy [3,5]. In our patient, although advancement flap work as well in the lower lip SCC defects as they do in upper lip, the shape of the defect did not lend itself well to a single advancement flap reconstruction in this old woman. But, we performed wide surgical excision and designed double V to Y flap advancement added to nasolabial island flap on the right side. Both skin and mucosal flap rely here on the intervening orbicularis muscle for the blood supply in the two sides. And as both two flap advance, the muscle and the subcutaneous tissue are pulled up into the defect. Additive radiotherapy was not performed due to lack of this mean in our setting.

3.4. Prognosis

The prognosis of lip SCC is best when there is no evidence of regional lymphnode involvement or distant metastasis. SCC of the lip usually run a relative indolent course and have relatively favorable prognosis [3]. And regardless of the width of the SCC free margins, the risk of local recurrence is related to size and the depth of infiltration of the tumor [6]. The relapse rate

after treatment can range from 5-35 percent, and the mortality associated with large or recurrent SCC of the lip is as high as 15 percent in some studies [6,7]. But, in our case, we obtained a good prognosis after 2 years follow up without any recurrence.

4. CONCLUSION

Squamous cell carcinoma of the lower lip is mostly seen in elderly. Our case reports the late diagnosis and treatment, because of late consultation. This mainly due to patient ignorance, socio-cultural believes and lack of money. The treatment of these cancers remains difficult, because it mostly leads to wide surgical excision and defect reconstruction, which compromises functional prognosis. This treatment is also very expensive for patient in limited resource countries like Côte d'Ivoire. Therefore, the disease should be detected in its initial stage to promptly institute effective and efficient care.

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