

Management of Square Carcinoma of the Lower Lip Using Camille-Bernard Flap under Local Anesthesia: When Constraints Dictate Our Attitude

Silly Toure^{1*}, Mouhamadou Makhtar Ndiaye¹, Abibou Ndiaye¹, Mame Sanou Diouf², Birame Loum², Baye Karim Diallo²

¹Department of Maxillofacial Surgery and Stomatology CHU, Aristide Le Dantec of Dakar, Dakar, Senegal

²ENT Department, Fann University Hospital, Dakar, Senegal

Email: *touresilly@gmail.com

How to cite this paper: Toure, S., Ndiaye, M.M., Ndiaye, A., Diouf, M.S., Loum, B. and Diallo, B.K. (2024) Management of Square Carcinoma of the Lower Lip Using Camille-Bernard Flap under Local Anesthesia: When Constraints Dictate Our Attitude. *Open Journal of Stomatology*, **14**, 191-197. <https://doi.org/10.4236/ojst.2024.144015>

Received: January 29, 2024

Accepted: April 27, 2024

Published: April 30, 2024

Copyright © 2024 by author(s) and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Introduction: Squamous cell carcinomas of the lip essentially pose a therapeutic management problem. In the West, their treatment is done under general anesthesia and follows the classic rules of oncology. In our context of exercise, we sometimes have a different attitude dictated by various constraints. **Observation:** 55-year-old patient with no notable history, seen in consultation for a very large ulcerative-budding lesion on the right 2/3 of the lower lip with mucocutaneous involvement without lymph node findings found on examination. Faced with this suspicious lesion and the patient's financial difficulties, we decided to operate under local anesthesia to remove this tumor. The oncological excision was followed by immediate plasty using a Camille-Bernard flap with a good immediate aesthetic and functional result and postoperative day 7. The patient was unable to take his surgical specimen to anatomy-pathology and was lost to follow-up due to lack of financial resources. On anatomo-pathological analysis of the surgical specimen, the margins were healthy with confirmation of squamous cell carcinoma (anapathological reading made for scientific interest). **Discussion:** The particular mentality of certain patients and their difficult financial conditions push us to have an unconventional therapeutic attitude in oncology, but which nevertheless makes it possible to resolve certain problems that we often face. Local anesthesia is possible and realistic in cases like ours and the results can be acceptable and life-saving.

Keywords

Squamous Cell Carcinoma, Lower Lip, Camille Bernard Flap, Local Anesthesia

1. Introduction

Lip carcinomas represent approximately 25% to 30% of oral mucosal tumors [1]. These tumors essentially pose a therapeutic management problem. Indeed, their surgery and repair procedures depend on the size and location of the tumor and must result in an aesthetic and functional result.

In the West, extensive squamous cell carcinomas of the lip are treated under general anesthesia and follow the classic rules of oncology [2].

In our context of exercise, we sometimes have a different attitude dictated by various constraints. Treatment under local anesthesia is one of its particularities.

The objective of this work is to present a case of squamous cell carcinoma of the lower lip managed in an atypical manner dictated by various constraints and reconstructed using the Camille Bernard technique under local anesthesia.

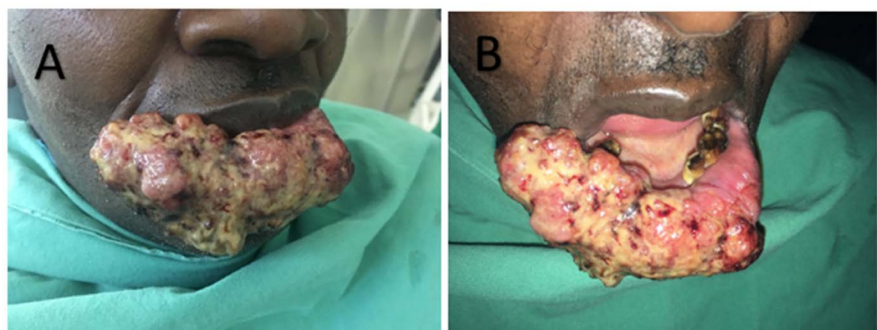
2. Observation

55-year-old patient with no notable pathological history, seen in consultation for a very large ulcerative budding lesion on the lower lip.

Clinical examination revealed a large ulcerative-budding tumor of the lower lip involving more than 2/3 of the right lower lip, extending to the right labial corner (Figure 1). This lesion bled on contact with indurated and irregular edges. The vestibule, the mandibular gum opposite the tumor, the chin region and the right labial corner are not clinically invaded (Figure 1). The lymph node areas of the neck were free.

Faced with this suspicious lesion, the patient having neither the means to pay for the anatomic-pathological assessment of a biopsy, much less a surgical intervention under general anesthesia, we decided to operate under local anesthesia to remove this tumor. This anesthesia was provided by a plan-by-plane infiltration of adrenalinized lidocaine associated with a block of the inferior dental nerve at the level of the Spix spine (Figure 2).

The oncological excision was followed by immediate plasty using a Camille-Bernard flap with a good aesthetic and functional result immediately and on postoperative day 7 (Figure 3 and Figure 4).



(A) Exo-oral examination. (B) Endo-oral examination.

Figure 1. ulcerative budding tumor of 2/3 of the lower lip.

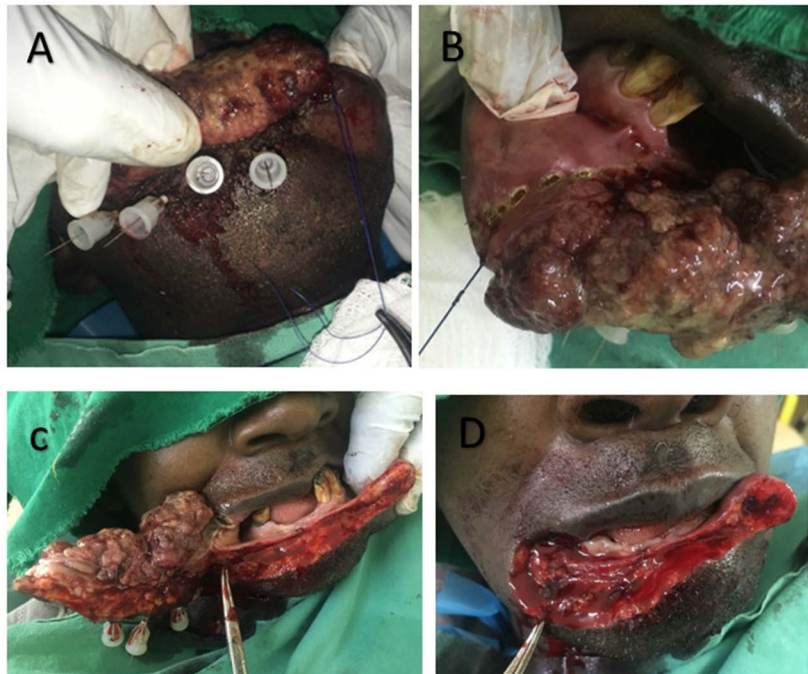


Figure 2. Carcinological excision of the tumor suspected of malignancy. A) Establishment of the skin markers of the resection margins; B) Establishment of the mucosal markers of the resection margins; C) Resection of the tumor; D) End of tumor resection



Figure 3. Creation of the Camille Bernard flap. A) Dissection; B and C) Plastic surgery; D) Immediate final result.



Figure 4. Post-operative results on day 7.

The patient was unable to take his surgical specimen to anatomy-pathology and was lost to follow-up, due to lack of financial means despite extensive research.

On anatomic-pathological analysis of the surgical specimen, the margins were healthy with confirmation of squamous cell carcinoma (anapathic reading made for scientific interest).

3. Discussion

The treatment of malignant tumors of the lip is essentially surgical [1]. Current international recommendations for surgical excision of lip carcinomas suggest an excision margin of 6 mm to 10 mm for squamous cell carcinoma and 3 mm to 5 mm for basal cell carcinoma, taking into account morphological and functional characteristics lips [3]. Tumor excision must pass within healthy limits and must not be minimized for aesthetic reasons.

Loss of substance less than a third of the lip generally indicates excision with direct V or W suture. Indeed, defects of 2 to 2.5 cm or not exceeding 1/3 of the length of the lip, can be perfectly closed without labial reconstruction with good aesthetic and functional results [4] [5].

For larger defects, labial reconstruction is often necessary and depends on several factors: the extension, the site of the lesion, the elasticity of the tissues, but also the age and comorbidities of the patient [1]. .

Local and locoregional flaps constitute one of the best solutions available to the surgeon to correct loss of substance exceeding a third of the labial volume [2]. Several local flap reconstruction techniques can be used. We can cite that of Karapandzic, commonly used in the reconstruction of large defects of the lip but also those of the lip corner, the McGregor, Abbé, Estlander and Gillies flaps [6] [7].

For larger losses of substance, reconstruction is a real challenge, often requiring more complex techniques. The main techniques available are local flaps: The Camille Bernard procedure [8], the Webster advancement flap [6], the Gillies flap [7], the Estlander heterolabial flap [6] and the flaps pedicled remote flaps (Dufourmental scalp flap, pedicled musculocutaneous flap of the latissimus dorsi and pectoralis major) or free remote flaps (cutaneous-fatty flap, such as inguinal, parascapular or radial antibrachial flaps) [1].

In our context, given the socio-economic situation of the patient and the degree of urgency, our choice fell on the Camille Bernard flap performed under local anesthesia.

In fact, this flap was described in 1853 by the French surgeon Raymond Camille Bernard after an operation carried out on a 78-year-old man with lip cancer [9].

The choice of excision under local anesthesia was supported by the absence of palpable cervical lymph nodes on examination. Indeed, lymph node metastases from carcinomas of the lip are usually late. The frequency of lymph node involvement varies from 26.5% to 31.4% depending on the series for squamous cell carcinomas and from 1 to 3% for basal cell carcinomas [6] [7] [8] [9] [10]. Lymph node invasion is relatively rare in T1 and T2 tumors, much more common for T3 and T4 tumors. The presence of lymphadenopathy also depends on the site of the lesion: commissural lesions are very lymphophilic [11]. In our patient, the tumor had not invaded the right corner of the lip, which facilitated the creation of this flap.

As squamous cell carcinoma of the lips is classified among squamous cell carcinomas with high metastatic potential [12], an evaluation is required to look for locoregional invasion and distant metastases.

In practice, the particular mentality of certain patients and their financial conditions push us to have in certain cases a therapeutic attitude that is unconventional in oncology, but which nevertheless makes it possible to resolve certain problems that we often face. This case showed that local anesthesia is possible and feasible in cases like ours and the results can be acceptable and life-saving.

This type of surgery requires rigorous monitoring. Unfortunately we lost sight of our patient after his check-up on postoperative day 7. In fact, the rate of local and lymph node recurrence is respectively 4 to 12% and 4 to 32% depending on the series [3] [4]. However, carcinomas of the lip often have a good prognosis with a 5-year survival rate between 80 and 96% [10] [11] [12] [13].

The success of a lip repair is evaluated by two criteria: the functional nature of the lip (salivary continence, labial mobility, phonation and chewing) and the aesthetic quality of the repair [6]. Although the techniques for reconstructing major substance losses are increasingly sophisticated, in our areas, which are often under-medicalized, with limited resources and the particular mentality of patients, we adopt a sometimes atypical therapeutic attitude which gives acceptable and effective results helps save lives.

4. Conclusion

The constraints of our daily practice with often a delay in diagnosis, limited financial resources and the particular mentality of our patients who do not always understand the issues, lead us to have non-classic attitudes which can be difficult to understand in developed countries. Local anesthesia is possible and realistic in cases like ours and the results can be acceptable and life-saving.

Ethical Considerations

The study patient had given informed consent and anonymity was an obligation. The confidentiality of the patient's clinical and paraclinical data was respected.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- [1] Bouatay, R., Harrathi, K., Bergaoui, E., Ferjaoui, M., Farhati, A., El korbi, A., Kolsi, N. and koubaa, J. (2021) Malignant Tumors of the Lip: Our Experience with 43 Cases. *J. TUNENT*, **46**, 22.
- [2] Staglianò, S., Tartaro, G., Boschetti, C.E., Guida, D., Colella, G. and Rauso, R. (2023) Surgical Reconstruction of Lip Cancer in the COVID-19 Era: Are Free Flaps or Lo-co-Regional Flaps Better? *Surgeries*, **4**, 108-119.
<https://doi.org/10.3390/surgeries4010012>
- [3] Visscher, J., Gooris, R.J.J., Vermey, A. and Roodenburg, J.L.N. (2002) Surgical Margins for Resection of Squamous Cell Carcinoma of the Lower Lip. *International Journal of Oral and Maxillofacial Surgery*, **31**, 154-157.
<https://doi.org/10.1054/ijom.2002.0232>
- [4] Dediol, E., Luksić, I. and Virag, M. (2008) Treatment of Squamous Cell Carcinoma of the Lip. *Collegium Antropologicum*, **32**, 199-202.
- [5] Lubek, J.E. and Ord, R.A. (2013) Lip Reconstruction. *Oral Maxillofac Surg Clin North Am*, **25**, 203-214. <https://doi.org/10.1016/j.coms.2013.01.001>
- [6] Dhambri, S., Turki, S., Dhaha, M., Jebali, S., Touati, S., Kedous, S., Gritli, S. (2020) Lip Reconstruction after Cancer Resection: Clinical Study of 70 Cases. *Medical Tunisia*, **98**, 846-854.
- [7] Prabhat, K., Bhama, M.D., MPH, FACS. (2020) Lip Reconstruction Using the Gillies Fan Flap. *Operative Techniques in Otolaryngology-Head and Neck Surgery*, **31**, 18-20. <https://doi.org/10.1016/j.otot.2019.12.005>
- [8] Herrera, E., Bosch, R.J. and Barrera, M.V. (2008) Reconstruction of the Lower Lip: Bernard Technique and Its Variants. *Dermatologic Surgery*, **34**, 648-655.
<https://doi.org/10.1111/j.1524-4725.2007.34121.x>
- [9] Marc, K.W. and Martin, D. (2017) Reconstruction of the Lower Lip According to Camille Bernard: Clarification of an Eponymic Confusion Technical Information: The So-Called Reconstruction of the Lower Lip of Camille Bernard: An Eponymous Confusion Clarified. *Annals of Aesthetic Plastic Surgery*, No. 6, 669-674.
- [10] Vukadinovic, M., Jezdic, Z., Petrovic, M., *et al.* (2007) Surgical Management of Squamous Cell Carcinoma of the Lip: Analysis of a 10-Year Experience in 223 Pa-

tients. *Journal of Oral and Maxillofacial Surgery*, **65**, 675-679.

<https://doi.org/10.1016/j.joms.2006.03.054>

- [11] Fernandez-Angel, I., Rodriguez-Archilla, A., *et al.* (2003) Markers of Metastasis in Lip Cancer. *European Journal of Dermatology*, **13**, 276-279.
- [12] Caudell, J.J., Gillison, M.L., M.ghami, E., Spencer, S. and Pfister, D.G. (2022) NCCN Guidelines® Insights: Head and Neck Cancers, Version 1.2022. *Journal of the National Comprehensive Cancer Network*, **20**, 224-234.
- [13] Kassi, K., Kouame, K., Gbery I.P., A.llou, A., Kouassi, K., Ecra, E., Ahogo K.C., Kallouga, M., Kouassi, Y.I., Kourouma, H.S., Sangare, A., Yoboue-Yao, P. and Kanga, J.M. (2016) Management of Squamous Cell Carcinoma of the Lower Lip in an Elderly Black African Woman. *Annals of Dermatology and Venereology*, **143**, S69.
[https://doi.org/10.1016/S0151-9638\(16\)30277-0](https://doi.org/10.1016/S0151-9638(16)30277-0)