

## Oral Verrucous Carcinoma: Case Report

Dr Hamidi Olaya<sup>1\*</sup>, Dr Zeine Abidine Baba Hassene<sup>1</sup>, Pr Dani Bouchra<sup>1</sup>, Pr Boulaadas Malik<sup>1</sup>

<sup>1</sup>Hospital of Specialties - Ibn Sina Hospital of Rabat – Morocco

DOI: [10.36347/sasjs.2024.v10i03.003](https://doi.org/10.36347/sasjs.2024.v10i03.003)

| Received: 09.01.2024 | Accepted: 13.02.2024 | Published: 04.03.2024

\*Corresponding author: Dr Hamidi Olaya

Hospital of Specialties - Ibn Sina Hospital of Rabat – Morocco

### Abstract

### Case Report

Verrucous carcinoma is usually considered a low-grade variant of squamous cell carcinoma. Our case is a 56-year-old woman presented to our department of maxillofacial surgery of Ibn Sina hospital in Rabat with a budding lesion of the upper lip evolving 2 years ago. The diagnosis retained was that of well-differentiated squamous cell carcinoma of the verrucous type with infiltration of the chorion. The therapeutic decision was to perform a surgical excision with a safety margin of 1 cm followed by suturing of the defect and commissuroplasty. Its diagnosis is based on clinical and histological features. The treatment is not well codified. Surgery remains the treatment of choice.

**Keywords:** Verrucous carcinoma, diagnosis, Surgery, squamous cell carcinoma.

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

## INTRODUCTION

Verrucous carcinoma (VC) of the oral cavity was first described by Ackerman in 1948, as a clinic pathological variety of squamous cell carcinoma (SCC) [1]. It is a slow-growing, locally invasive exophytic tumor whose histological diagnosis remains difficult [1, 2]. Verrucous carcinomas represent 2 to 12% of all oral carcinomas. The average age at diagnosis is 69 years, and there is a clear correlation with tobacco use, as well as poor oral hygiene [3]. This type of neoplasia can be found in the mucosa and skin, including the anorectal region, the penis, the vagina and the skin of the extremities (often the soles of the feet). The mucosal surfaces of the head and neck are the most frequent sites: the oral cavity and larynx are particularly at risk (90% of all cases of head and neck involvement). The preferred oral locations are the inner side of the cheeks (bite line) and the gums [4, 5].

The objective of this work is to highlight the particular anatomo-clinical characteristics of this malignant tumor.

## CASE REPORT

A 56-year-old woman of Moroccan origin, without any notable medical history, who consulted for a budding lesion of the upper lip which had gradually increased in volume over 2 years to reach the right corner of the lip and the inner surface of the right cheek (Figures 1, 2, 3). The history did not find any evidence of smoking or chronic alcoholism. The clinical examination noted a vegetating labial tumor, budding painless and non-

bleeding, measuring 5 cm on its long diameter, taking up the right third of the upper lip, overflowing on the mucous side with 2 cm towards the internal face of the cheek without vestibular filling, extending beyond the right labial corner by 5mm and exceeding the mucocutaneous line by 3mm. The remainder of the mucocutaneous examination was normal. The somatic examination found a patient in good general condition with poor oral hygiene. Cervical examination did not reveal any palpable lymphadenopathy.

The biological examinations were without abnormalities, there was no lymphopenia. A biopsy was performed which revealed a budding tumor process with a warty appearance characterized by surface hyperkeratosis. It was made of anastomosing trabeculae showing signs of squamous differentiation with the formation of horny globes. Mitoses were numerous with the presence of monstrous nuclei and significant anisokaryosis. The chorion was very inflammatory and the site of lymphoplasmacytic infiltrates with focal presence of cytonuclear atypia. The immunohistochemical study, on paraffin sections, using anti-p16 antibodies (DAB immunoperoxidase technique) showed clear positivity of the tumor population. The diagnosis retained was that of well-differentiated squamous cell carcinoma of the verrucous type with infiltration of the chorion. Chest x-ray and cervical ultrasound were normal. The therapeutic decision was to perform a surgical excision with a safety margin of 1 cm followed by suturing of the defect and commissuroplasty and placement of a nasogastric tube. Postoperative

treatment included IV antibiotic therapy for 1 week followed by oral administration as well as analgesic treatment. The patient subsequently received post-operative radiotherapy.

Postoperative follow-up at 1 week (Figure 4), 2 weeks and 1 month was satisfying.



**Figure 1: Image showing the right labio commissural budding lesion**



**Figure 2: Image showing the right labio commissural budding lesion**



**Figure 3: Image showing the intraoral component of the lesion**



**Figure 4: Post-operative image (after 1 week)**

## DISCUSSION

Verrucous carcinoma is usually considered a low-grade variant of squamous cell carcinoma, slow growing, showing a low incidence of metastasis although locally invasive and destructive. Its diagnosis is based on the clinical macroscopic and microscopic characteristics of the lesion: the benign appearance of this tumor on the histological level makes its diagnosis difficult. It is characterized by low mitotic activity resulting in slow growth; therefore, it may take several years to reach the size that causes symptoms. Patients may report oral discomfort, difficulty chewing or swallowing, and bad breath. Pain usually indicates tumor invasion into surrounding structures.

Verrucous carcinoma usually appears as an exophytic lesion with a warty, cauliflower-like surface,

as shown in Figure 1. Despite its slow growth, it can reach a significant size and infiltrate adjacent tissues such as muscle and bone. However, even when locally advanced, oral verrucous carcinoma does not tend to metastasize to regional lymph nodes and distant sites. Cervical lymphadenopathy is frequently observed during initial clinical or radiological examination and is generally considered reactive, secondary to inflammation of the tumor.

The case of our patient raises the differential diagnosis of chronic white lesions affecting the mucosal surfaces of the oral cavity. These lesions have different origins, they can be:

- ✓ Reactive (tobacco, prosthesis irritation, chemical burn, alcohol, actinic cheilitis).
- ✓ Infectious: bacterial infections (syphilis), viral

(Epstein - Barr virus = hairy leukoplakia, HPV: common warts and condyloma acuminata), mycotic (candidiasis).

- ✓ Autoimmune: (lichen planus, discoid erythematosus lupus).
- ✓ Hereditary: (leukoedema, white sponge nevus, dyskeratosis congenita, Darier's disease).
- ✓ Cancer symptoms: squamous cell carcinoma.
- ✓ Idiopathic: leukoplakia (verrucous leukoplakia) where no cause is found, but there are contributing factors such as: tobacco, alcohol, candida infection, HPV infection, ultraviolet radiation, vitamin deficiencies and trauma.

Histologically, verrucous carcinoma shows both endophytic and exophytic growth aspects, it is a well-differentiated hyperplastic epithelial lesion. A densely keratinized surface (parakeratin) and precisely circumscribed deep margins appearing to repress rather than infiltrate the basement membrane characterize the tumor [6].

The histological differential diagnosis includes common warts and condyloma acuminata, well-differentiated squamous cell carcinoma, keratoacanthoma, and warty hyperplasia.

The treatment is not well codified [2]. Surgery remains the treatment of choice [7, 8]. The place of radiotherapy alone is controversial, however, it remains complementary to surgery in case of invasion of bone or adjacent soft tissues [8, 9]. Chemotherapy with bleomycin or methotrexate has been used successfully, alone in inoperable cases or preoperatively in cases of extensive lesions allowing reduction of tumor volume [1, 10]. Laser, photodynamic therapy, cryosurgery Immunotherapy and retinoid have been used, but the effectiveness of these treatments is controversial [11].

Regardless of the treatments undertaken, recurrences are frequent. The prognosis for oral VC is generally good (7 to 8% mortality) except for forms of "hybrid VC" which have a poorer prognosis [8]. The survival rate is 95% at 5 years and 83.4% at 10 years [11, 12].

Death can follow an intercurrent illness but it is mainly linked to a lack of local control of the lesion.

## CONCLUSION

Verrucous carcinoma is a low-grade malignant tumor, locally invasive and has low metastatic potential and the particularity of being painless and flexible on palpation. Its diagnosis is based on clinical and

histological features. Surgical excision represents the treatment of choice for small and well-defined lesions. Radiotherapy can complete surgery in some cases.

## REFERENCES

1. Jyothirmayi, R., Sankaranarayanan, R., Varghese, C., Jacob, R., & Nair, M. K. (1997). Radiotherapy in the treatment of verrucous carcinoma of the oral cavity. *Oral oncology*, 33(2), 124-128.
2. Tomb, R., El-Hajj, H., Nehme, E., & Haddad, A. (2003). Verrucous carcinoma of the tongue occurring in lichen planus lesions. In *Annals of dermatology and venereology* (Vol. 130, No. 1, pp. 55-57).
3. Koch, B. B., Trask, D. K., Hoffman, H. T., Karnell, L. H., Robinson, R. A., Zhen, W., ... & Commission on Cancer at the American College of Surgeons, Chicago, IL, the American Cancer Society, Atlanta, GA. (2001). National survey of head and neck verrucous carcinoma: patterns of presentation, care, and outcome. *Cancer*, 92(1), 110-120.
4. Grinspan, D. (1995). Verrucous carcinoma of the skin and mucosa. *Journal of the American Academy of Dermatology*, 33(5 Pt 1), 843-844.
5. Salesiotis, A., Soong, R., Diasio, R. B., Frost, A., & Cullen, K. J. (2003). Capecitabine induces rapid, sustained response in two patients with extensive oral verrucous carcinoma. *Clinical cancer research*, 9(2), 580-585.
6. Spiro, R. H. (1998). Verrucous carcinoma, then and now. *The American Journal of Surgery*, 176(5), 393-397.
7. Warshaw, E. M., Templeton, S. F., & Washington, C. V. (2000). Verrucous carcinoma occurring in a lesion of oral lichen planus. *CUTIS-NEW YORK*, 65(4), 219-222.
8. IRIARTE-ORTABE, J., Laka, A., Marbaix, E., & Reychler, H. (1991). Oral verrucous carcinoma: analysis of 6 clinical cases and review of the literature. *French Journal of Otorhinolaryngology (1977)*, 40 (8), 404-413.
9. Shimm, D. S., Wong, R. B., & Peters, L. J. (1991). Radiotherapy for basal and squamous cell skin carcinomas. *Am J Clin Oncol*, 14, 383-386.
10. Kamath, V. V., Varma, R. R., Gadewar, D. R., & Muralidhar, M. (1989). Oral verrucous carcinoma: an analysis of 37 cases. *Journal of Cranio-Maxillofacial Surgery*, 17(7), 309-314.
11. d'Elbée, J. M., & Fricain, J. C. (2014). Carcinome verruqueux buccal traité par méthotrexate. *Médecine Buccale Chirurgie Buccale*, 20(1), 21-25.
12. Kuffer, R. (2009). *La muqueuse buccale: de la clinique au traitement*. Éditions Med'com.