

# Squamous Cell Carcinoma: A Bilateral Location at the Cheek Mucosa

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## Abstract

Squamous cell carcinoma of the buccal mucosa is a rare clinical entity, accounting for approximately 10% of all oral cancers in the United State. The tongue is the commonest site for Oral Cavity Squamous Cell Cancers (OSCC) in the western literature. This is the first case reported of a patient with a bilateral location of squamous cell carcinoma at the cheek mucosa treated with surgery, adjuvant radiotherapy with a good follow up

**Keywords:** Cell carcinoma; Buccal mucosa; Surgery; Radiotherapy; Neoplasm

## Introduction

Cancer of the buccal mucosa is an uncommon and aggressive neoplasm of the oral cavity. It occurs more frequently in men and is associated with tobacco and alcohol; most presenting symptoms include a buccal mass with pain and ulceration. We report a patient with a bilateral carcinoma of the cheek mucosa. Extensive literature search suggests that this scenario has never been reported.

## **Case Report**

A 78-year-old women presented with a 7 month history of left mass of the cheek mucosa, 5 month later she described a new lesion at the right sided mucosa. she denied any ENT symptoms: dysphagia, bleeding mucosa or painful lesion. Her medical history included the use of removable denture since 30 years, and a controlled arterial hypertension without any others medicals history (smoking, drinking or chewig tobacco).

The clinical examination showed a left budding reddish tumor of the mucosa, measuring 3 cm, respecting lips commissure, retro molar trigone, maxillary and mandibular gingiva. The right side showed a 2.5 cm pink ulcerous lesion of the mucosa touching the retro molar trigone and the mandibular gingiva (Figure 1). The rest of the clinical examination was normal.

A computed tomography scan demonstrated showed a tumor of the left buccinators muscle with a soft tissue density, measuring  $26 \times$ 18 mm and enhanced after contrast injection. At the inside the tumor was coming into contact with the mobile tongue with a greasy border of separation. The alveolar bone, mandibular angle and maxillary sinus floor were touching without any lysis (Figure 2). Left cervical lymph nodes II B, measuring 14 mm, the panoramic radiograph was normal (Figure 3).

The microscopic examination of the biopsy showed an hyperplastic squamous mucosa with formation of horny globes and cells show a cytoplasmic atypia, well differentiated squamous cells, arranged as islands with different shapes and sizes, with keratinous pearls inside,

Inside the keratinous pearls, cells were acidophil with pyknotic nuclei and karyolysis. The diagnosis of well differentiated squamous cell carcinoma of the left side was confirmed. The right side biopsy showed an inflammatory squamous mucosa without signs of malignity, the diagnosis of well differentiated squamous cell carcinoma was confirmed at the second biopsy after 1 month.

A trans oral surgical resection, guided by the preoperative imaging data was realized, with a bilateral modified radical neck dissection, we carefully dissected the tumor along multiple axes, and determined the infiltrate of buccal carcinoma along the muscles, fascia and bones lysis.

Left side the budding tumor was totally removed; it was limited at the cheek mucosa without any extension. the surgical margins were realized to confirm the complete resection (Figure 4).

At the right side the ulcerous tumor was touching the retro molar trigone and the mandibular gingiva, the tumor and the gingiva was resected, with a mandibular bone drilling. The orientation of the specimen is marked, and mandibular, retro molar trigone and deep margins were sent for frozen section to confirm complete resection (Figure 5).

Postoperative Histopathologic Examination (HPE) showed a welldifferentiated SCC; with a free left surgical margins and a right tumoral margins. All lymph nodes dissected were free of tumor.

A right hemimandibulectomy was realized, carrying of, the mandibular bone, the tumor and the bichat fat pad. The temporoparietal fascial flap was used for the oral cavity loss of substances.



Figure 1: (A) Left reddish budding tumor, (B) right pink ulcerous tumor.

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Figure 2: CT scan (axial cut) showing a tumor of the left buccinators muscle (\*) coming into contact with mandibular angle.



Figure 3: A normal panoramic radiograph.



(A)



Figure 4: (A) Left cheek mucosa after resection, bichat fat pad (\*), (B) budding tumor (left specimen).



Figure 5: (A) A right mandibular bone drilling (\*), (B) ulcerous tumor (right specimen).

She received adjuvant radiotherapy of dose 60 Gy in conventional fractionation, after a one year follow up, the patient reminds free of symptoms.

## Discussion

Squamous cell carcinoma of the oral cavity is the sixth most common cancer in the world, and one of the leading causes of cancer related death in developing countries [1,2].

The large majority of oral cavity squamous cell cancers patients are over 45 years of age, and 6% of oral cancers occur in young people under the age of 45 years. Most studies reported a male predominance in all intraoral location. But some have reported a female predominance in younger age [2]. These cancers typically present with local symptoms; distant metastases are relatively uncommon, is a locally aggressive neoplasm of the oral cavity [3].

Surgery is usually the treatment of choice. For high-risk features and extensive lesions, adjuvant radiotherapy with or without chemotherapy has been seen to improve tumor control rates [4]. Carcinoma of the mandibular region is a separate entity associated with special issues relating to diagnosis, evaluation of extension, surgical treatment, results, and prognosis, with a recurrence rate as high as 70% and the survival rate is as low as 26%. The hemi mandibulectomy represent, the mainstay of surgical treatment for this entity, it allows the complete extirpation of tumour, with much better exposure and ease of primary closure [5].

The first 1.5 years of follow up after treatment represent 90% of recurrences. Local recurrence is more frequent than regional recurrence and has been reported between 23% and 32% [6].

An exhaustive English literature search suggests this to be the first reported case of bilateral location of squamous cell carcinoma at the cheek mucosa.

### Conclusion

Cancer of the buccal mucosa is an uncommon and aggressive neoplasm of the oral cavity, the cheek mucosa is a rare localization, and the bilateral character is firstly described in our case report.

#### Conflict of Interest

The authors declare that they have no competing interests.

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