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Case Report

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Salivary Glands Carcinosarcoma: Case Report and Literature Review

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ABSTRACT

Materials and Methods: Systematic research was made on PubMed and academic google baselines, we use the next.

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Introduction

The sarcomatous carcinomas, in the head and neck neoplasm classification at OMS, appear as a separate entity, because of their complex etiology [1]. Can be found in both epithelial carcinomatous cells and spindle cells because it shares the characteristics of an epithelial tumor and stromal tumor [2,3]. Given the above, it has received many names such as: carcinosarcoma, pseudo sarcoma, lane tumor or spindle cell carcinoma [3]. It is considered as a malign and very aggressive mixed tumor that represents less than 0.2 % of the malign tumors of the salivary glands [4].

It was first reported by Virchow in 1864 and it was not until 1894 that Szmurio reported the first case on head and neck localization [5,6]. Epidemiologically USA and Taiwan have the highest reported incidences which is closely related to lifestyles [6]. The principal risk factors are tobacco, alcohol radiation and masculine gender between 50 and 70`s years old [2].

This variety of cancer has been reported in multiple organs such as lungs, head and neck, urinary tract, female genital tract, prostate, oral cavity and nasopharynx [2, 3]. Most of the cases have been documented on the head and neck; the larynx has the first place with 69%, followed by oral mucosa with 23% according to Chang et al study [3]. Only 46 carcinosarcoma cases had been reported in the worldwide literature; the majority at parotid gland when they are new [1, 7]. However it has been shown that the documentation of this variety on the head and neck has the worst prognosis compared with the same stage tumors in other localizations [3].

The case of a patient with a fast-growing mass in oropharynx is presented, which is taken to surgical approach and subsequently is confirmed the diagnosis of salivary gland carcinoma, sarcomatous variant in the histology.

Clinical Case

Female 44 years old patient, known by the head and neck service because of a long-term clinical presentation about odynophagia, dysphagia, and mass sensation at the palate level. She presented with a right peritonsillar mass that grows to the left tonsil that causes obliteration of the airway. First biopsy in 11/10/2022 which reported low grade infiltrating carcinoma of the salivary gland type without vascular neural invasion and compromised lesion edges. With this result, it was scheduled for surgical management.

Otherwise, she entered the emergency department because of three days of worsening liquid and solid dysphagia related to dyspnea and tumor bleeding. As important risk factors she smoked three cigarettes a day and drank alcohol each 8 days until drunkenness.

At physical examination, a large mass was evident on the palate up to the oropharynx with active bleeding. A CT scan was ordered as well as the assessment of the microsurgical team. During the hospitalization presented several bleeding episodes that lead to normocytic anemia.

Diagnostic Evaluation

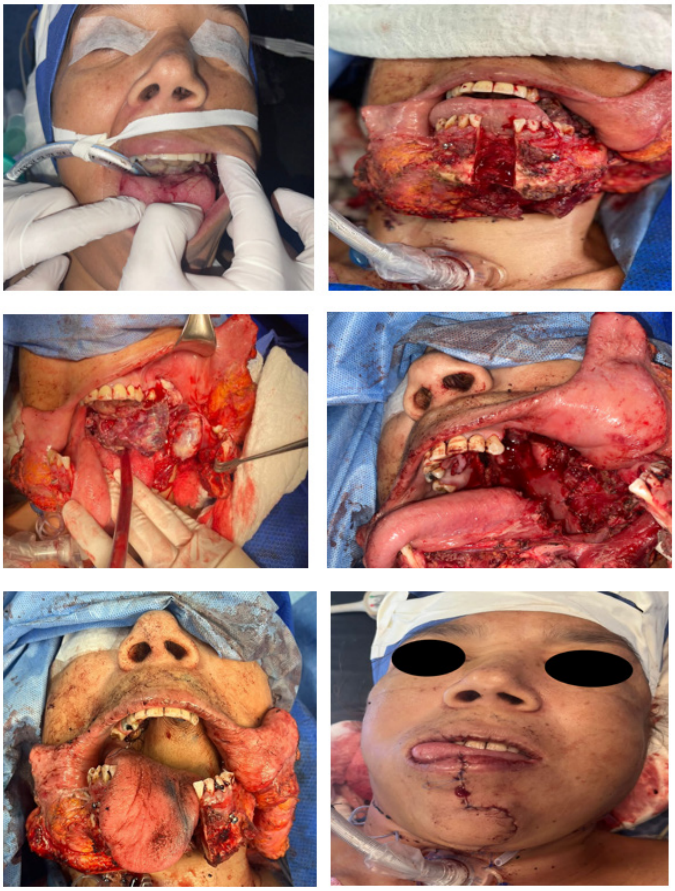
In the face CT scan was found an irregular mass depending on the left tonsil wall with heterogeneous density, predominant solid with hypodense areas that reveals necrotic aspect. The dimensions were 51*54*45 mm that compresses and displaces the airway to the right. It also shows lymph nodes at IB level lever less than 1 cm.

Surgical Approachment

The 3/12/2022 it has been made a mandibular SPLIT + tumor resection of the parapharyngeal space + subtotal palatectomy + modified radical left neck dissection + percutaneous tracheostomy. Also, the microsurgical/ plastic surgery team performed an ALT type free flap to the facial vessels.

Pathology samples were taken of the lymph nodes, bichat bag, maxillary sinus mucosa, palate tumor and parapharyngeal space.

During the immediate postoperative the patient requires mechanical ventilation and vasopressor because of distributive shock. After that the patient presents a satisfactory evolution and the free flap without complications. The surgical team discharged the patient with a home hospitalization program.



Pathology

The final pathology shows a low-grade salivary gland carcinoma with large progression areas and with differentiation to a sarcomatoid pattern present in 90% of the tumor. This component was a high grade. Also shows laceration of the tumor, vascular and perineural invasion. The tumor compromises mucosa and bone tissue. The edges are positive for tumor, the anterior extension of premaxillary soft tissue, bone, and muscle of maxillary sinus as well. lymph nodes were negative for malignancy.

Due to the presence of positive margins, management with adjuvant radiotherapy was indicated.

Discussion

This kind of neoplasm usually debuts with a fast-growing mass, polypod type [3]. The typical presentation symptoms at head and neck localization are obstructive symptoms such as: dysphonia, dysphagia, odynophagia and/or Dyspnea, so the diagnosis is usually made early [2]. It has a high local recurrence rate and bad prognosis [5]. Usually metastasizes in the lungs followed by lymph nodes. Therefore, it is convenient to perform a neck dissection in patients with evidence of cervical lymph node alteration [4].

The treatment of this kind of tumor is a big challenge due to the rarity of malignancy, the high recurrence rate, little literature review about this topic and the difficulty in histopathological confirmation. That's why sometimes required immunohistochemistry markers (ME, cytokeratin, desmin, S-100 etc) [2].

Literary reports suggest starting with a biopsy of the lesion, followed by radiotherapy depending on the stage. If it is advanced, surgical management is indicated and neoadjuvant radiotherapy [2]. In 1998 Ballo et al shows the effectiveness of the radiotherapy in this carcinoma variant; however, the surgery remains the pillar management of this kind of tumor on head and neck [3]. In large tumors that require reconstruction it is suggested the free flap; those ones allow de large areas reconstruction in a single surgical time. This one is the GOLD standard to reconstruction after tumor resection [6].

Conclusions

The tumors with sarcomatoid variant or well known as salivary gland carcinosarcomas are very aggressive tumors with a poor prognosis. They are difficult to handle because of the mixture of the histological characteristics with both components: carcinoma and sarcoma.

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