Oral metastasis of renal cell carcinoma, presentation of a case

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Abstract

The oral cavity constitutes a site of low prevalence for metastasis of malignant tumors. Nevertheless, it has a high prevalence for metastasis of renal origin. Besides the kidneys, there are other primary sites with high prevalence of metastasis to the oral mucosa, such as the lungs, skin and breasts.

Metastasis is common in patients with a background of treated renal tumors, thereby, it is proper to determine the possibility of oral metastasis as part of the protocol of attention. However, it constitutes a diagnostic challenge when it presents in patients with no renal antecedents. It is in this type of patients that the diagnosis of carcinoma is achieved by means of a metastasis. Survival rate in these patients is short because at the time of the metastasis diagnosis, the general compromise is high.

The following report describes a case referred from the Rheumatology Unit with an intraoral tumor, that was finally diagnosed as a Metastasic Renal Cell Carcinoma with multiple metastasis.

Key words: Metastasis, clear cells, hypernefroma, oral metastasis, renal carcinoma.

Introduction

Renal cell carcinoma constitutes one of the malignant pathologies that produces more oral metastasis (1). Other authors also mention primary tumors with high prevalence of oral metastasis, in the lungs, skin and breasts (1, 2).

Renal cell carcinoma represents 2% of deaths by cancer (3) and normally its initial presentation is by means of a metastasis (1, 4-6), which results in a poor prognosis because of the tardy diagnosis. A relationship has been determined between patients treated for renal cell carcinoma with radical nefrectomy and the appearance of metastasis several years later (7), thereby a follow-up and complete study is recommended in this group of treated patients (7, 8).

The diagnosis of these metastasis constitutes a challenge when there is no history of previous renal alterations (1, 6) and histopathologically it often confuses with other carcinomas (1, 9).

Case Report

Male sex 74 year-old patient. Agricultural worker until 1995. In treatment for arthrosis in the Rheumatology Unit since 2006. Is referred to our Oral Surgery and Maxillofacial Traumatology Unit for the presence of a "furuncle" in the midline of the lower gingiva of 1 month of evolution.

At general exam the patient is well located and cooperati-



Fig. 1. Initial clinical photograph, June 13, 2007. Lesion with a bleeding granulomatous appearance, eritematous covering mucossa, with whiteish areas and zones of necrosis, firm at palpation

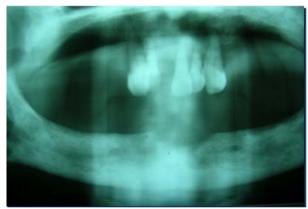


Fig. 2. Panoramic radiography, June 13, 2007. Bone reabsorption in mid mandibular zone, not corticalized, with rounded appearance.



Fig. 3. Control photo, July 17, 2007, one month after the first consultation.

ve. He does not report consumption of tobacco, alcohol or any type of drug. Extraoral exam: nothing special. Intraoral exam: edentulous partially upper and totally lower, presents a lesion of granulomatous appearance of 3 x 2cms in mandibular ridge, mid anterior region, painless, bleeding, eritematous covering mucossa, with whiteish areas and zones of necrosis (figure 1).

Within his general medical background admission to the Rheumatology Unit for a degenerative pathology of his knees and polyarthralgia.

A radiological study is requested (figure 2) which shows bone reabsorption in the midline in relation to the lesion. An incisional biopsy is planned in minor operating room with local anesthesia. Biopsy is sent. The histopathological study determines the presence of a Renal Cell Carcinoma. The patient is sent to Urology to determine primary focus. New photographs are taken after 1 month from admission (figure 3).

In that unit a CT study is requested. The surgical exploration determines renal tumor stage IV, metastasis in mandible, two brain metastasis, ten pulmonary metastasis. The patient is sent to the National Cancer Institute for radiotherapy and palliative treatment.

Discussion

Renal cell carcinoma is a malignant pathology of difficult and many times tardy diagnosis (1, 4-6). It constitutes an enlargement originated in the proximal renal tubular epithelium (9, 10).

Within the malignant pathologies, renal cell carcinoma provoques the most oral metastasis (1). However, other authors mention primary tumors with high prevalence of oral metastasis, in the lungs, skin and breasts (1, 2).

It is a tumor of low prevalence (4, 7, 11). It mainly presents in men (4, 9) with a prevalence of 2:1 (3), cases have been observed in all age ranks, with a predilection for the 5th and 7th decade.

There are reports of patients with a history of renal cell carcinoma who presented metastasis years later (7). Within the literature, investigators determined an interval of 5 to 36 months between the appearance of the primary tumor and the metastasis. The problem are those patients who do not have a history of malignant nephropathies (1, 6) in which the clinics becomes relevant (7, 9, 12), given that its expression can be multiple and unspecific; a complicated epistaxis (7), lingual tumors (6), neurological alterations (11), paresthesias (12), strokes (4), visual alterations (4), signs of hypopituitarism (4) or impotence (4).

The clinical disease is also associated to general conditions such as tobacco, hypercaloric diets, obesity, terminal chronic renal failure, exposition to occupational carcinogens such as cadmium and asbestus, analgesic abuse, genetic factors (3, 9, 13) and it has been associated to Von Hippel Lindau Disease (10).

The histopathological diagnosis also constitutes a cha-

llenge, because of the similarity to other pathologies. Nevertheless, the difference is given by the marked cellular atypia and vascularity of the connective tissue (1, 12).

The evolution of the patients is poor, with a mortality rate over 90% at 5 years (4, 14). Within this group, those patients treated with chemotherapy in combination to radical surgery had better prognosis (7). On the other hand, those patients who presented metastasis once treated the primary pathology had better prognosis than those which had not been treated yet for their malignant nephropathy (8, 9).

Considering the metastasis as a differential diagnosis of lesions with suspicious aspect of the oral mucossa constitutes an element of importance, since this type of carcinoma simulates other similar conditions.

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