

Painful no-defined radiolucent lesion of the mandible: importance of a correct differential diagnosis

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Introduction. Some patients experience persistent oral pain without having apparent dental problems, such as decays or anything else that could explain their pain. These patients often consult several dentists, looking for a solution, undergoing to several therapies, such as root canal treatments, dental extractions and other procedures without any relief. Since, head and neck regions may often be affected by inflammatory, neoplastic, immune, infectious, or degenerative diseases, sometimes, the diagnosis of oro-facial pain is difficult to perform. In fact, pain is a subjective symptom based on sensation referred by patients and on the clinical evaluation of several characteristics, such as the area, the time trend, the irradiation and the possible regression after a therapy. The aim of this case report is to underline the importance of considering the oral pain, not only strictly associated to dental problems but also like a possible evidence of more serious pathologies.

Case report. A 52-year-old Caucasian female was referred by her private practitioner to the Department of Oral and Maxillofacial Sciences of "Sapienza", University of Rome with a history of pain at left mandible. Medical and family histories were not significant. Complete case history revealed that pain started 6 months ago, with a gradual increase up to the actual situation in which it was no longer tolerable. Furthermore, in the last months, the patient received, by her private dentist, the root canal therapies of teeth 34, 35 and 36 for suspected endodontic problems but, after these treatments, the pain was not solved. On extra-oral examination, no palpable lymphnodes in the head and neck region, were noticed. Intra-oral examination revealed a small non-tender swelling, mimicking a dental abscess adjacent the teeth 34, 35 and 36, with grade 1 of mobility. An Orthopantomography (OPT) and Computed Tomography (CT) were prescribed and a combined therapy of antibiotic and painkillers was administered. Both OPT and CT revealed poorly defined radiolucent lesion at the periapical region of teeth 35, 36 and, since after one week, at follow-up visit, teeth mobility dramatically worsened, a surgical explorative flap was performed. Under local anesthesia, a flap was opened, the mobile teeth were extracted and a mixed bone and fibrous tissue sample was sent to the anatomo-pathologist for the histological evaluation. Histologically, a fibrous connective tumor tissue with oval-shaped and fused elements was observed; the tumor cells showed

pleomorphic nuclei and abundant eosinophilic cytoplasm. Immunohistochemistry was positive for vimentin; while it was negative for CK-MNF116, EMA, Actin ML, Desmin, CD68, BCL-2, CD31, CD34, CD99 and S100. A diagnosis of aggressive mesenchymal tumor was performed.

Conclusion. Clinicians cannot ignore the features of oral pain, especially when it is persisting or worsening and accompanied by other clinical signs and symptoms, as facial swelling or difficulty in mouth opening, so a careful differential diagnosis must be given in order to avoid wrong and disabling treatments. The case reported shows the need for improved education of dentist regarding orofacial pain, considering oral cavity as part of a wider and more complex system. If the general practitioner does not have the appropriate skills to solve the problem, it is advisable to refer patient to a specialist in oral pathology and medicine.

References

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