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Refractory Toothache: A Multiple Myeloma Case Report

Case Report
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Abstract

We report a case of Multiple Myeloma (MM) with an unusual presentation: pathological mandibular fracture. The patient presented at the Dentist with a toothache and a tooth infection was suspected. After a few appointments without pain relief, a pathological mandibular fracture was diagnosed. Monoclonal plasma cells were identified in the bone biopsy performed. With this case we want to highlight the importance of formulating MM as a differential diagnosis of refractory toothache.

Keywords: Multiple Myeloma; Plasma Cells; Mandibular Fractures; Quality of Life; Bone Diseases; Mandible; Dentists; Toothache

Introduction

Multiple myeloma (MM) is an uncommon malignancy that exhibits a wide range of possible clinical presentations [1]. Osteolytic bone disease is a major feature of MM. Usually it involves the central skeleton rather than the extremities [2]. We report a case of MM with an unusual presentation: pathological mandibular fracture.

Case Report

Man, 62-years-old, presented at the Dentist with toothache and oedema of mandible's left side. A tooth infection was suspected, and its extraction was performed. Some days later, while was eating, he felt a sudden sharp pain. He returned to the Dentist and after a few appointments without pain relief, an orthopantomography was performed, revealing a pathological mandibular fracture with an osteolytic lesion. A three-dimensional computed craniofacial tomography confirmed the lytic lesion, with 46x26x28mm (Figure 1). Monoclonal plasma cells were identified by immunohistochemistry in bone biopsy performed.

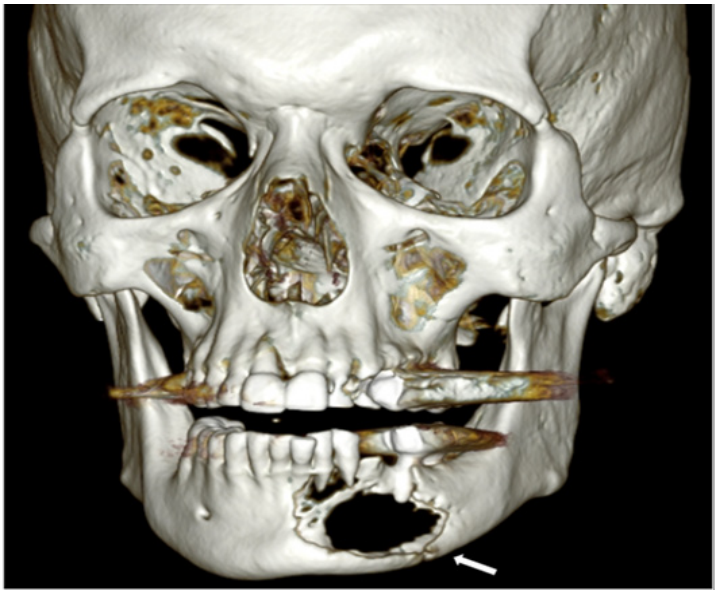

Figure 1: Three-dimensional computed craniofacial tomography with a mandibular lytic lesion (arrow) and a pathological fracture.

Two months later after the initial symptoms the patient was referred to haematology. He presented without mandibular pain, but with fear of eating, causing a major impact on his quality of life. The initial MM diagnostic workup revealed anaemia (10,8g/dL); lambda light chain expression on serum and urine immunofixation electrophoresis; high lambda light chain (85.58mg/dL) on serum free light chain assay and beta-2microglobulin level of 2,18mg/L. Bone marrow aspirate showed 5% plasma cells by flow cytometry and 13% by morphology, and 1q21 amplification on fluorescence in situ hybridization. Positron emission tomography/computed tomography was positive for mandible's left side, C7 vertebra and other bones.

A lambda light chain MM was diagnosed (stage IIA-SD/II-ISS/II-RISS). Patient started radiotherapy and initiated VTD (bortezomib/thalidomide/dexamethasone) treatment. He was also proposed for autologous hematopoietic cell transplantation. Currently, the patient has finished radiotherapy and is in VTD's second cycle. He has no pain and can eat properly.

Discussion

With this case we want to highlight an atypical presentation and the importance of formulating MM as a differential diagnosis of refractory toothache, so these patients can be diagnosed early.

References

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