



Medication Related Osteonecrosis of the Jaw (MRONJ): Clinical Atraumatic Management

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Abstract

High doses of Bisphosphonates prescribed to avoid bone metastasis in oncologist patients ought to be controlled interdisciplinary between physicians and dentists in order to avoid manipulate necrotic bone tissue. It is the case Health professionals could control Medication related Osteonecrosis of the Jaw (MRONJ) progression and let bone sequestration could be exfoliated time requires according a lot of variables without manipulate it, besides patients interacting with the attending physician in exacerbation events of injuries that affect the patient's general health they must be received surgery treatment to eliminate all septic foci and control [1].

Keywords: Oncology; Zoledronic acid; Medication Related Osteonecrosis of the Jaw (MRONJ)

Introduction

According to the American Association of Oral and Maxillofacial Surgeons (AAOMS, 2014), MRONJ is defined as exposed or necrotic bone in the maxillofacial region that has persisted for more than 8 weeks in association with current or previous BPs or DS therapy and with a lack of head and neck radiotherapy. AAOMS divided the MRONJ into 4 stages from 0 to 3, according to the clinical and radiological aspect of the osteonecrotic lesion: stage 0: Osteonecrotic lesion without sign-pathognomonic evidence of osteonecrosis; stage 1: osteonecrotic lesion with clinical signs and absence of clinical symptoms; Stage 2: Osteonecrotic lesion with sign and evident clinical symptoms; Stage 3: Osteonecrotic lesion with signs and evident symptoms that involve noble structures: pathological fractures, anesthesia of the lower dental nerve, oral-nasal communication, oral-sinus communication, skin fistulas [2].

Clinical Case

A Male patient, 74 years, history of prostatic AC: malignant, vertebral hypercalcemia, hypertensive, under treatment with Zoledronic Acid 4mg / ml /20 days, with 25 months. With a history of implant remove 24 because of peri-implantitis: two years before the consultation. Necrotic bone expanded because of surgery manipulation was few weeks later. With frank over contaminated bone exposure. Injury that after bone toilet, besides without oral-sinus communication. Initially, He was presented with Cone Beam images showing a radiolucid lesion surrounded 23 and implant 25 but left sinus without compromise. He was presented with Cone Beam images 18 months later showing severely biggest radiolucid lesion than initial one with surrounded 23 and implant 25 but left sinus without compromise [3]. Antiseptic washes were started with 0.12% Chlorhexidine, 10% Povidone Iodo and 0.05% Rifamycin, alternating them

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monthly in order to produce the reflux of the inflammatory content, opportunely accompanied with antibiotic therapy: Ciprofloxacin 500 mg each 12 hours for 10 days, talking with the

treating doctor, accompanying your five systemic clinical exacerbations (lymphadenopathy, tumor) [1-5].

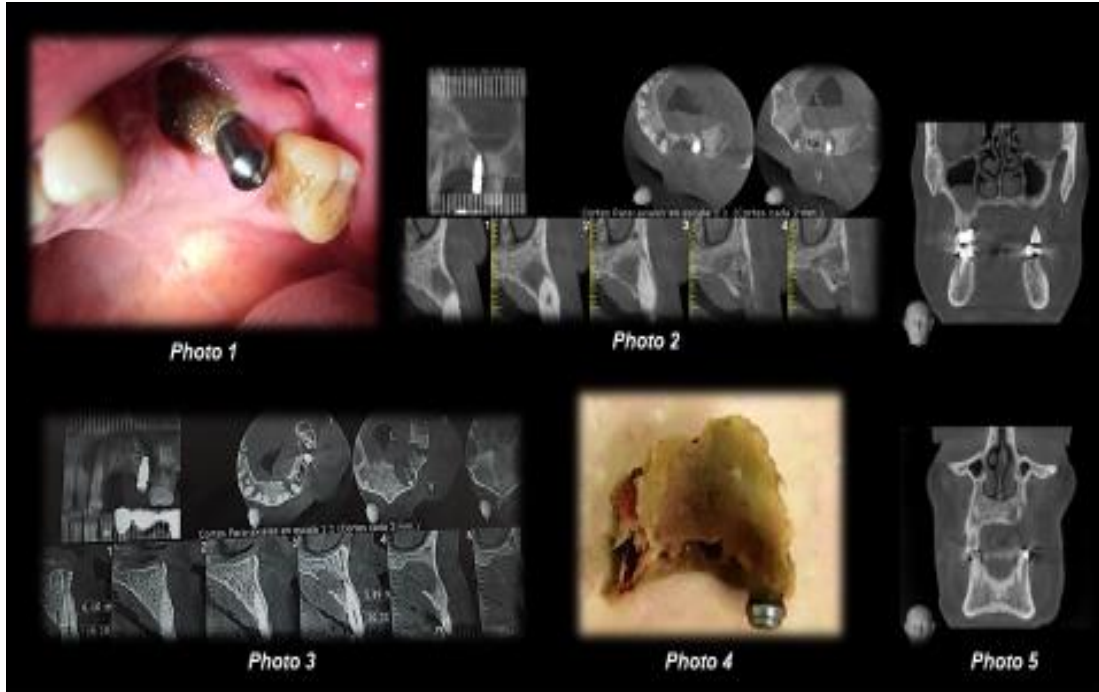


Figure 1: With a history of implant remove 24 because of peri-implantitis.

The clinical picture of MRONJ has remitted two years after implant 24 was removed by spontaneously expelling the bone sequestration covering 25 implant during COVID 19 pandemic, Reconfirming its diagnosis with the support of the Laboratory of Pathological Anatomy. His soft tissues recovered, without presenting evident clinical and / or radiological lesions or recurrences in fourteen years. Prosthetic rehabilitation was indicated [5-6]. He has presented with actual Cone Beam images post expelling necrotic bone showing left sinus without compromise.

Conclusion

It is clear from the suggested treatments that before the diagnosis of MRONJ the therapeutic attitude is consolidated in non-invasive maneuvers regarding the manipulation of bone tissue, performing the pertinent clinical controls in order to avoid systemic spread to deep planes, that could condition a septicemia picture in affected patients, interacting with the attending physician in the event of a certain event of exacerbation of injuries that affect the patient's general health [7].

References

1. Picardo SN, Rey EA. Clinical healthcare protocol for bisphosphonate related osteonecrosis of the jaw. *Int J Dentistry Oral Health*. 2007; 3: 42-44.

2. Ruggiero SL, Dodson TB, Fantasia J, Goodday R, Aghaloo T, Mehrotra B, et al. American Association of Oral and Maxillofacial Surgeons position paper on medication-related osteonecrosis of the jaw - 2014 update. *J Oral Maxillofac Surg*. 2014; 72: 1938-1956.

3. Kim KM, Rhee Y, Kwon YD, Kwon TG, Lee JK, Kim DY. Medication related osteonecrosis of the jaw: 2015 position statement of the Korean Society for Bone and Mineral Research and the Korean Association of Oral and Maxillofacial Surgeons. *J Bone Metab*. 2015; 2: 151-165.

4. Khan AA, Morrison A, Kendler DL, Rizzoli R, Hanley DA, Felsenberg D, et al. Case-based review of osteonecrosis of the jaw (ONJ) and application of the international recommendations for management from the international task force on ONJ. *J Clin Densitom*. 2017; 20: 8-24.

5. Limones A, Sáez-Alcaide LM, Díaz-Parreño SA, Helm A, Bornstein MM, Molinero-Mourelle P. Medication-related osteonecrosis of the jaws (MRONJ) in cancer patients treated with denosumab VS. zoledronic acid: A systematic review and meta-analysis. *Med Oral Patol Cir Bucal*. 2020; 25: 326-333.

6. Stavropoulos A, Bertl K, Pietschmann P, Pandis N, Schjødt M, Klinge B. The effect of antiresorptive drugs on implant therapy: Systematic review and meta-analysis. *Clin Oral Implants Res*. 2018; 18: 54-92.

7. Fleisher KE, Kontio R, Otto S. Antiresorptive drug-related osteonecrosis of the jaw (ARONJ) - A guide to research. AOCMF; 2016; Switzerland.