

ONJ UPDATE 2024

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Abstract Submission FORM

CLINICAL, RADIOLOGIC AND TREATMENT FEATURES OF PERI-IMPLANTITIS INDUCED MEDICATION-RELATED OSTEONECROSIS OF THE JAW: A CASE SERIES.

SECTION: *1B*

AUTHORS (max 8): Contrassegnare SPEAKER con “*”

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Background. Medication-related osteonecrosis of the jaw (MRONJ) is a pathologic condition of the maxillary bones arising following the treatment with anti-resorptive/antiangiogenic drugs for the modulation of bone remodeling. MRONJ is currently defined by the clinical presence of exposed bone or bone that can be probed through an intraoral or extraoral fistula(e) for more than 8 weeks, with a history of administration of antiresorptive or antiangiogenic agents, in the absence of previous head and neck radiation therapy or jaw metastases of other tumors. While the available literature has highlighted a strong correlation between tooth extraction and MRONJ onset, data on the relationship between dental implants and MRONJ are still controversial. The aim of the present study is to report a case series of patients with peri-implantitis induced medication-related osteonecrosis of the jaw, describing the clinical and radiologic features of the condition and the surgical treatment outcome.

Patients and methods. Thirty-six consecutive patients with clinical diagnosis of peri-implantitis associated with MRONJ were retrospectively included in the study. The sample was stratified depending on oral, pharmacological, and general health variables. The number of affected implants was recorded in all patients, and MRONJ staging applied. Surgical treatment was performed with a standardized operative protocol, involving implant removal, sequestrectomy, debridement of soft tissue, and bone curettage. Follow-up was performed at 12 months after surgery.

Results. Patients were almost equally distributed in terms of underlying diseases between osteoporotic and oncologic patients. All MRONJ lesions were symptomatic, and in 15 patients bone exposure was detected. In total, 123 implants were evaluated, with MRONJ being present around 68 implants. Twenty-four patients were diagnosed with Stage III MRONJ, and twelve patients with Stage II MRONJ. Surgical treatment led to complete healing in 84.4% of cases, with 100% success for maxillary MRONJ.

Conclusions. The clinical signs of peri-implantitis may reveal the presence of an underlying MRONJ diagnosis in patients under pharmacological treatment with anti-resorptive/antiangiogenic drugs. Surgical treatment seems to have a positive impact on MRONJ treatment in cases of peri-implant involvement. However, monitoring and prevention are fundamental in patients under pharmacological treatment with anti-resorptive/ antiangiogenic drugs, as peri-implant MRONJ can develop also in absence of specific traumatic events.

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2. Tempesta A, Capodiferro S, Mauceri R, Lauritano D, Maiorano E, Favia G, Limongelli L. Peri-implantitis-like medication-related osteonecrosis of the jaw: Clinical considerations and histological evaluation with confocal laser scanning microscope. *Oral Dis.* 2022 Sep;28(6):1603-1609.

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