

# ONJ UPDATE 2024

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### Abstract Submission FORM

**MEDICATION-RELATED OSTEONECROSIS OF THE JAWS: A RETROSPECTIVE SINGLE CENTER STUDY.**

SECTION: Descrizione di casistiche di ONJ (n ≥10 casi) – Epidemiologia (case series)

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**Background.** Medication-related osteonecrosis of the jaw (MRONJ) is a serious side effect of antiresorptive or antiangiogenic therapies. Controversy remains regarding the best treatment practices for the management of patients with MRONJ. The purpose of this research project is to describe and assess the characteristics, the risk factors, the diagnosis, the management, and outcomes of MRONJ in a single third level center.

**Patients and methods.**

This study is based on a systematic computer-assisted database that allows to record patients with MRONJ in a single University third level center, since January 1st 2010 to today.

The medical charts were analyzed and the following data were recorded for each patient: gender, age, voluptuary habits, comorbidities, drugs, diagnosis, treatment, outcome.

**Results.**

A total of 54 patients (32 females, 22 males) were included in this study, with a mean age of 59,8 years at diagnosis. Of these, 50 patients had received antiresorptive or antiangiogenic therapies because of cancer, while 4 patients were diagnosed MRONJ following osteoporosis medications. The most frequently observed cancer was multiple myeloma (17 patients), followed by breast cancer (13 patients), and prostate adenocarcinoma (5 patients)- The most frequently involved medication was zoledronate (33 patients), followed by pamidronate (5 patients), and alendronate (4 cases). The most important local risk factor for MRONJ was a tooth extraction in 28 cases. Mandible was involved in 28 cases and maxilla in 15 cases, whereas both were involved in 11 cases. Twenty-two patients underwent surgical treatment, mainly by sequestrectomy or debridement.

**Conclusions.**

Although it occurs with high frequency and is harmful, the exact mechanism of MRONJ remains unknown, and systematic and targeted approaches are still lacking. Dental practitioners and oral surgeons focus on the etiology of osteonecrosis in the mandible and maxilla as well as the appropriate oral interventions for high-risk patients. Adequate nursing care and pharmacotherapy management are crucial too.

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