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Abstract Submission FORM

MRONJ IN PATIENTS WITH OSTEOPOROSIS AND NON-MALIGNANT DISEASES RECEIVING LOW DOSE ANTIRESORPTIVE AGENTS

SECTION: 1C

AUTHORS (max 8): Contrassegnare SPEAKER con "*"

* Rossetti Giorgia¹, Fasciolo Antonella^{2,3}, Brigo Paola^{3,4}, Tartara Daniela^{3,4}, Ferrero Elisabetta^{3,4}, Biamonte Emilia⁵, Maconi Antonio ¹, Fusco Vittorio¹

AFFILIATION:

- 1. Research and Innovation Department DAIRI
- 2. Maxillofacial Unit
- 3. MRONJ Multidisciplinary Team
- 4. Day Hospital for Oncology and Hematology, nurse staff
- 5. Endocrinology Unit

Azienda Ospedaliera-Universitaria "SS Antonio e Biagio e Cesare Arrigo", Alessandria, Italy

Background. Patients at risk of Medication-Related Osteonecrosis of the Jaw (MRONJ) include patients with bone metastases of cancer and myeloma patients, all receiving antiresorptive treatments (bisphosphonates or denosumab), known as Bone Modifying Agents (BMAs) with/without biological agents, but also patients with osteoporosis and other non-malignant diseases¹. Since 2006, a MRONJ Multidisciplinary Team was established in Alessandria Hospital, including: maxillofacial surgeons /dentists, oncologists, nurses, radiologists, nuclear medicine and other medicine specialists, data managers¹. We collected MRONJ cases among cancer patients and myeloma patients treated a tour hospital with High-Dose BMAs (HD BMAs) ¹, but also other patients receiving care at our centre if: a) MRONJ was suspected after treatment for cancer and myeloma in neighboring hospitals, or b) MRONJ was suspected among osteoporosis patients in the provincial territory by private practice dentists or physicians, after Low-Dose BMAs (LD BMAs). **Patients and methods.** We updated our data, published in 2021³, about more than 900 patients observed by members of the MRONJ

Patients and methods. We updated our data, published in 2021³, about more than 900 patients observed by members of the MRONJ Team, analyzing characteristics of cases confirmed as MRONJ according to Italian (SIPMO-SICMF) definition and recommendations², particularly about patients treated with LD-BMAs.

Results. We followed 130 MRONJ cases of confirmed MRONJ, found among patients receiving treatment with bisphosphonates and/or denosumab and/or antiangiogenics drugs, after both clinical and imaging evaluation. Second-level imaging was mostly based on Computed Tomography (CT scan).

Out of 130, 28 (21.5%) patients had been treated with LD-BMAs due to osteoporosis and other non-malignant disorders.

Disease: 24 osteoporosis (alone or with other disease), 4 other (arthritis, Rheumatoid Arthritis, lupus). Status in January 2024: 24 alive, 4 dead.

Received treatment: alendronate alone in 9, denosumab (60 mg every 6 moths) alone in 4, ibandronate in 5, pamidronate in 1, alendronate/denosumab sequence in 4, ibandronate/alendronate sequence in 2, other sequences of drugs in 3.

MRONJ diagnosis was registered: in years 2006-2010 (3 cases in 5 years), 2011-2015 (8 cases in 5 years), 2016-2020 (10 cases in 5 years), 2021-2023 (7 cases in 3 years).

Conclusions.

In recent years we observed a slight increase of MRONJ cases observed in patients with osteoporosis and other non-malignant diseases (i.e., rheumatic, autoimmune, etc.), mostly receiving "low dose" bisphosphonates and/or "low dose" denosumab.

Even if the individual risk is very different along their drug history (5-20% for metastatic cancer patients and myeloma patients, with higher values in long survivors, *versus* less than 1% in patients receiving "low dose" drugs), the large number of osteoporosis patients treated for several years justifies the observation of MRONJ cases among patients with osteoporosis and other non-malignant diseases.

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- 1. Bedogni et al . Italian Position Paper. At Oral Diseases 2024.
- 2. Campisi et al. Raccomandazioni clinico-terapeutiche sull'osteonecrosi delle ossa mascellari (ONJ)farmaco-relata e sua prevenzione at https://www.sipmo.it/wp-content/uploads/2020/08/SICMF-SIPMO-2.0 web-con-cover-2020.pdf
- 3. Fasciolo et al Qeios https://www.geios.com/read/0QK8E2

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