

# ONJ UPDATE 2024

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### Abstract Submission FORM

#### TREATMENT AND OUTCOME OF MAXILLARY SINUSITIS ASSOCIATED WITH MAXILLARY MRONJ

SECTION: 4B

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

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**Background.** Medication-related osteonecrosis of the jaws (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 an history of administration of antiresorptive or antiangiogenic agents, in the absence of previous head and neck radiation therapy or jaw metastases of other tumors. Advanced cases of maxillary MRONJ can involve the maxillary sinus, leading to degenerative changes in the antral mucosa and eventually to maxillary sinusitis. MRONJ has been reported to be a predisposing factor for sinusitis, as the development of bone necrosis and secondary infections facilitate the disruption of the Schneiderian membrane. The purpose of this study was to evaluate the efficacy of conservative surgical treatment of maxillary sinusitis associated with MRONJ.

**Patients and methods.** Subjects diagnosed with MRONJ associated to maxillary sinusitis, treated with conservative surgery and with a follow-up period of at least 6 months were included. Conservative surgical treatment was performed under antibiotic prophylaxis and involved sequestrectomy, soft tissue debridement and bone curettage with limited or no extension. Maxillary sinusitis treatment comprised antral lavage with saline. The degree of involvement of the maxillary sinus was classified using the classification of Kurabaiashi and collaborators.

**Results.** Thirty-six patients (mean age of  $71.5 \pm 9.9$  years (range 45-88)) were enrolled, for a total of 36 lesions. Thirty-one patients were treated with bisphosphonates intravenously for neoplastic disease (metastatic breast cancer 16 patients, 45%; multiple myeloma 9 patients, 25%; metastatic lung cancer 3 patients, 8%; metastatic prostate cancer 1 patient, 3%; metastatic kidney cancer 1 patient, 3%). The remaining 5 patients were receiving bisphosphonates for the treatment of osteoporosis. Six-months after conservative surgical treatment, complete resolution was observed in 87% of cases (32 lesions). Oro-antral communication resideduated in five patients and was treated with a removable prosthesis with obturator.

**Conclusions.** Conservative surgical treatment of MRONJ lesions associated to maxillary sinusitis, may represent a valid therapeutic approach. Conservative surgery should be encouraged at early MRONJ stages and after medical therapy failure.

#### REFERENCES:

1. Park JH, Alfafara AM, Park YL, Bae JH, Kim SJ. Medication-related osteonecrosis of the maxilla: Prognosis of oral surgery combined with endoscopic sinus surgery. *Oral Dis.* 2021 May;27(4):962-969.
2. Mast G, Otto S, Mücke T, Schreyer C, Bissinger O, Kolk A, Wolff KD, Ehrenfeld M, Stürzenbaum SR, Pautke C. Incidence of maxillary sinusitis and oro-antral fistulae in bisphosphonate-related osteonecrosis of the jaw. *J Craniomaxillofac Surg.* 2012 Oct;40(7):568-71.

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