

ONJ UPDATE 2024

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Abstract Submission FORM

EXTRA-PLATYSMAL RECONSTRUCTIVE PLATE FOR THE SURGICAL TREATMENT OF MANDIBLE ONJ: OUR EXPERIENCE IN 20 PATIENTS

SECTION: 4A

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

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Background. Osteonecrosis of the jaw is a pathology of both the maxillary and mandibular bone related to both the systemic treatment with ONJ-related medications and Radiotherapy of the head and neck region. ONJ severely affects the quality of life of the patient and increases his burden of disease. The aim of the treatment of the ONJ is to slow the progression of bone necrosis and prevent the development of the advanced stage pathology complications. Surgical treatment is required under specific indications and the extent of bone resection depends on the amount of affected tissue. One of the main concerns related to mandibular ONJ is pathological fractures. When a conservative surgical treatment is indicated, it is crucial to balance the need of complete removal of affected bone and the necessity to guarantee adequate residual bone thickness. In our experience, in case of high risk of pathological or iatrogenic fracture, bone fixation using a pre-plated extra-platysmal reconstructive plate can supply adequate load bearing strength to the residual mandible and avoid the direct communication of the internal fixation devices and intra-oral surgical site, thus reducing the risk of contamination and infection.

Patients and methods. From 2013 to 2023, 20 patients underwent surgical curettage of the necrotic bone site and inseting of extra-platysmal 2.5 mm reconstructive locking plate through sub-mandibular cervical access. Post-operative clinical and radiological follow-up has been assessed.

Results. Sixteen patients were diagnosed with MRONJ (14 related to Bisphosphonates, 1 related to Bisphosphonates and Denosumab and 1 related to Denosumab) and four patients were diagnosed with Osteoradionecrosis. After a mean follow-up time of 20.1 months, 15 patients were disease-free and no infection or exposition of the plate were observed. In 2 patients (1 with MRONJ and 1 with Osteoradionecrosis), local progression of disease has been observed, and a further surgical curettage was performed, without the need for plate removal. In 1 patient, local progression of disease has been identified, and, at the time of writing, a clinical wait and see strategy has been adopted. In 2 patients, local progression of disease has led to segmental mandibulectomy and total plate removal and no reconstructive strategy has been considered.

Conclusions. The technique is safe, associated with a low morbidity rate; furthermore, also patients with poor general clinical conditions can undergo this kind of surgery, allows to perform effective surgical curettage of the necrotic tissue and reduces the risk of pathological and iatrogenic fractures of the mandible. In our experience the rate of disease control is encouraging and the complications related to the technique and to the presence of the plate and screws are limited. The technique can offer a favorable risks-benefits ratio if surgical treatment of ONJ of the mandible is indicated.

REFERENCES:

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3. Campisi G et al.: <https://www.unipapress.it/it/book/raccomandazioni-clinico-terapeutiche-sull%E2%80%99osteonecrosi-delle-ossa-mascellari-onj--farmaco-relata-e-sua-prevenzione> 256/.

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