

AB128. SOH22ABS087. Medication related osteonecrosis of the jaws (MRONJ): a novel surgical approach and protocol

Eimear Mooney, Daniel Dilworth, Liam Costello, Gerard Kearns

National Maxillofacial Unit, St. James's Hospital, Dublin, Ireland

Background: Medication related osteonecrosis of the jaws (MRONJ) is a suppurative osteomyelitis condition associated with antiresorptive or antiangiogenic medication therapy in the presence of osteoporosis (OP), multiple myeloma or metastatic bone deposits. Treatment for MRONJ is not yet specifically defined. This report describes a protocol for the management of this condition.

Methods: This is a retrospective study of fourteen dentate patients with Stage II/III MRONJ (5 M, 9 F). All patients have failed conservative management for MRONJ and were subsequently managed as hospital inpatients. All MRONJ patients underwent debridement of necrotic tissue under general anaesthesia. Mean age 66 [45–84] years. The underlying diagnoses were: OP (n=4, 4 F), multiple myeloma (n=5, 3 M 2 F), metastatic cancer (n=5, 2 prostate, 3 breast).

Results: The mean duration of treatment with bisphosphonates was 5.5 years for OP and 6.5 years for malignant disease. Those with OP (n=4) had reconstruction using iliac crest bone and buccal fat grafting (BFG). Patients with malignant disease had reconstruction with BFG alone, those with maxillary MRONJ (n=3) had pedicled BFG, and mandibular MRONJ (n=11) free BFG. Mean hospital stay was 8.6 [5–21] days. Patients were treated with intravenous antibiotics and nasogastric feeding, discharged on Tocopherol and Pentoxifylline for 3 months with a 1-month course

of oral antibiotics. Mean follow up was 28 [1–60] months. Wound closure was observed in all patients without disease recurrence.

Conclusions: A protocol is described for the management of advanced MRONJ involving debridement of necrotic bone and reconstruction using bone and BFG. Follow-up suggests that this protocol is of benefit in managing MRONJ.

Keywords: Antiresorptive; antiangiogenic; medication related osteonecrosis of the jaws (MRONJ); osteonecrosis; surgical protocol

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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