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DENOSUMAB-RELATED ONJ IN METASTATIC LUNG CANCER: A CASE REPORT AND LITERATURE REVIEW

SECTION: 2B

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Background.

Medication-related osteonecrosis of the jaw (MRONJ) during or after bisphosphonate (BFs) treatment is well known in literature. However, there are few cases reported related to the use of other pharmaceutical agents, such as Denosumab.

In 2010, the US Food and Drug Administration approved the clinical use of Denosumab (Xgeva) for the prevention of skeletal-related events (SREs) in patients with metastatic bone cancer.

This report highlights the importance of a proper management of a Xgeva-related ONJ, providing a comprehensive review of related cases to investigate the relationships between risk factors and clinical manifestations.

A comparative analysis with BFs-ONJ is then carried out in relation to differences in terms of incidence, risk factors and treatment.

Patients and methods.

A patient with lung cancer, treated with subcutaneous injections of Denosumab (Xgeva), was referred to the oral surgery department at the “G. d’Annunzio” University in Chieti (Unich). The patient developed an osteolytic lesion involving the first quadrant.

A “drug holiday” from Denosumab was prescribed, along with antiseptic and antibiotic therapy prior to the surgical treatment.

The lesion was exposed and necrotic bone removed until bleeding margins were reached.

A strict follow-up was established and, after the complete healing of the tissues, the drug was reintroduced.

Results.

In the reported case, Denosumab-related ONJ had a similar clinical manifestation to BFs-ONJ.

The treatment, conducted following the SICMF-SIPMO’s guidelines, led to the complete healing of the lesion and no recurrence was observed during the follow-up.

Although the overall frequency of Denosumab-related ONJ was low, such a condition has a huge impact on the patient’s quality of life.

Dose regimen and frequency of assumption are critical factors to be considered for a comprehensive analysis of such results.

Conclusions.

Medical and dental practitioners must recognize the importance of Xgeva when assessing the patient’s risk and planning treatment.

ONJ treatment by surgical intervention must be carefully evaluated.

Due to its favorable pharmacodynamics, the temporary discontinuation of the drug should be considered and concerted by clinicians and prescribing specialists in order to foster the healing process.

Personalized risk assessment and a multidisciplinary approach are essential for optimizing patient outcomes. Managing risks and treatments in accordance with current guidelines is mandatory to maximize the effectiveness of procedures and improve overall patient well-being.

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