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Editorial

The Osteonecrosis of the Jaw Related by Different Medicaments

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The osteonecrosis on the jaw induced by drug is a rare disease that can cause serious consequences with implication of quality of life. Its incidence, etiology and pathogenesis are not fully explained and hence the need for further research in this area is required. The American Association of Oral and Maxillofacial Surgeons in 1914 suggests complementing the previous report on disease and change in nomenclature; Nowadays the term drug-induced osteonecrosis of the jaw is being used instead of the previous term bisphosphonate-induced osteonecrosis of the jaw. This change in the term occurs in order to cover growing, newly occurring cases of osteonecrosis, which are associated not only with the use of bisphosphonates, but also with denosumab, anti-angiogenic drugs and m-TOR inhibitors. These drugs treat a number of bony disorders, including postmenopausal osteoporosis and osteopenia, hypercalcaemia, multiple myeloma [1], Paget's disease, and bone resorption caused by bone metastases that originate most often soluble tumors such as breast, prostate, or cancer of the lungs [2,3].

Bisphosphonates and denosumab are part of a group of antiresorptive drugs whose common goal is to control bone resorption and reduce the incidence of skeletal complications. Although both drugs have a different mechanism of action, the common goal is to inhibit the osteoclasts' activity. By inhibiting osteoclasts, the balance between creating a new bone and removing the old one is abandoned, which leads to the lack of regenerative capacity of the jaw, which will make it susceptible to the pathological process in the presence of a constant microtrauma and present pathogenic bacteria from the oral cavity. In the process of initiating this disease, the type of medicine, the manner of administration and the duration of therapy, as well as the therapeutic indication (osteoporosis or malignancy) and of course the local risk factors [4,5] are of great importance.

Bisphosphonates in the form of intravenous preparations are used to prevent adverse events of the skeleton in bone metastases from solid tumors, the most common of which are breast, prostate, or lung cancer.

Of course, for proper treatment, but also prevention of this disease, the multidisciplinary approach and good communication between dentists, oncologists and endocrinologists is very important.

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