ONJ UPDATE 2024
Torino, 24 febbraio 2024

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Abstract Submission FORM

ONJ IN A YOUNG ADULT PATIENT AFTER SHORT TERM USE OF CORTISONE AND OMALIZUMAB.

SECTION: *2A*

AUTHORS (max 8): Contrassegnare SPEAKER con "*"
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Background. MRONJ is an adverse reaction induced by different categories of drugs. We describe a recent case of a young male adult who had osteonecrotic bone exposure following the use of a monoclonal antibody in association with cortisone therapy.
Case Presentation. A 30-year-old male patient has been experiencing pain, swelling, and gingival erosion with erythematous borders in the lingual gum area of tooth 3.7 for about a month. He suffers from asthma and is being treated with beclomethasone dipropionate and formoterol fumarate dihydrate spray, omalizumab i.m. 3 times every 15 days, and tiotropium spray. Recently, he took betamethasone tablets 1 mg 4 tablets/day, gradually reduced, and prednisone tablets 25 mg 1/2 tablets daily for 15 days for otitis.
During the first clinical examination, the patient expelled a small bone fragment, resulting in a 3mm bone exposure on the lingual side of the mandible, 2 mm under the gingival margin. The exposed bone had a probing depth of approximately 6 mm, with bleeding on probing and pain, and bony spicules appeared in the central location. The adjacent teeth (3.6-3.7) were vital and did not present mobility or gingival pockets. The patient reported the last omalizumab administration the week before the first clinical examination. The CBCT revealed an irregularity of the ridge profile, consistent with the presence of an osteonecrotic focus.
The patient was monitored every 2 weeks for two months, to decide if surgery was necessary. The prescribed therapy included hyaluronic acid gel, chlorhexidine gel 0.5%, antibiotic therapy (amoxicillin and clavulanic acid tablets 1g twice a day for 7 days and metronidazole tablets 250mg twice a day for 7 days), and anti-inflammatory therapy (ibuprofen tablets 600mg). The patient skipped the omalizumab intake session with the agreement of the allergist specialist. There was a gradual improvement of the bone exposure. At the final follow-up, no signs of bone exposure or gingival inflammation were present.
Conclusions. Omalizumab is a type of medication used to treat persistent allergic asthma. It is a humanized monoclonal antibody that may cause drug-related pharyngeal irritation, abdominal pain, fever, headache, and other adverse events during treatment. However, no cases of oral bone exposure have been reported with this medication.
On the other hand, people with asthma who rely on oral corticosteroids are at risk of bone loss and an increased risk of fractures in the hip and spine. A recent study conducted on mice showed that taking prednisone orally for three weeks can inhibit endochondral ossification, delay the healing process, and reduce bone biomechanical properties. This can adversely affect the formation of hard callus (woven bone) and bone remodeling during the healing process.
Short term use of prednisone, in association with betamethasone and omalizumab, maybe consequently to a local oral traumatic event could induce bone exposure and a sequestrum release.

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