

BISPHOSPHONATES AND OSTEONECROSIS OF THE JAW

Bisphosphonates are medications used in the management of various diseases of the bone. Drugs such as FOSAMAX and ACTONEL are taken orally for the treatment of osteoporosis. Intravenous bisphosphonates, such as ZOMETA and AREDIA are administered to reduce bone pain and skeletal complications in patients with multiple myeloma, breast, lung, and other cancers, and Paget's disease of bone.

Reports of osteonecrosis of the jaw (infection and death of bone cells in the jaw) associated with the use of these drugs began to surface in 2003. The majority of reported cases were diagnosed after dental procedures such as tooth extraction. In very rare cases, it appears to occur spontaneously in patients taking these drugs.

It is essential to note that the vast majority of these cases occurred in patients receiving the intravenous bisphosphonates, which are associated with much higher doses than the oral medications. The incidence of osteonecrosis of the jaw occurring in patients taking the oral bisphosphonates is extremely low—approximately 0.0007%.

An expert panel was assembled to study the issue and make recommendations on the dental management of patients receiving oral bisphosphonates. Its report was submitted to the American Dental Association in June 2006. Basically, it suggests that good oral hygiene along with regular dental care is the best way to lower risk, and that routine dental treatment need not be modified. If any periodontal or oral surgery is required, the recommendation is to treat one area at a time and allow a 2 month follow-up period where the patient rinses twice daily with chlorhexidine (an antimicrobial rinse) to ensure complete healing before proceeding to the next area. A course of antibiotics to be administered before and after the surgery may also be deemed necessary by the surgeon if other risk factors are present.

If the patient is taking intravenous bisphosphonates, the elective dental surgeries should be postponed. This should be discussed with your dentist and your physician.

Sources:

"Dental Management of Patients Receiving Oral Bisphosphonate Therapy—Expert Panel Recommendations". Report of the Council on Scientific Affairs, American Dental Association. June 2006.

ADA.org: A-Z topics.
Osteonecrosis of the Jaw.

ADA.org: Science in the News Section
Reports Address Osteonecrosis of the Jaw in Patients Receiving Bisphosphonate Therapy.