

Osteoporosis Drugs and Your Teeth

If you have osteoporosis, it might be a good idea to see your dentist before you start taking medications!

That's because recent research suggests taking popular osteoporosis drugs like Fosamax, Actonel, and Boniva may put you at risk for jaw bone problems when dental infection or periodontal disease is present. In addition, the procedures necessary to treat dental disease can be problematic. The risk is greatest if you need gum surgery or tooth removal.

What's going on? Fosamax and similar drugs (called oral bisphosphonates) help strengthen your bones by inhibiting bone-resorbing cells called osteoclasts. The suppression of bone resorption results in an increase in bone thickness and mass, preventing bone fractures. The problem occurs because osteoclasts serve a very important function: they are involved in normal bone turnover and repair. The side effect in taking the medication, therefore, is that there is a reduced ability for the osteoclasts to aid in the normal repair process.

The bottom line

The bottom line is this: If you're taking one of these agents, you may be at risk for a bone problem called osteonecrosis of the jaw (ONJ). If active dental disease is present or if an oral surgical procedure is performed, an area of exposed bone can exist that will not heal. There are no procedures to date that will heal over the bone exposure.

The risk of developing ONJ is very very low—it is estimated to occur in less than one per 100,000 persons per year taking the oral medication. There are intravenous forms of this medication (i.e., in higher doses) used to prevent bone metastasis in cancer that definitely have a higher incidence of jaw problems. In fact, with IV medications, spontaneous ONJ can occur. Minor nicks and abrasions to the gum tissue may cause the gum tissue to break down and lead to exposed bone.

All of this creates a dilemma for patients. After all, an estimated 10 million Americans over the age

of 50 have osteoporosis, while another 24 million are at risk. Osteoporosis-related bone fracture is a major cause of morbidity, functional dependence, and institutionalization of older Americans. The decision to start taking oral bisphosphonates to prevent fracture needs to be a careful decision made between you and your medical doctor, weighed against the very low chance of developing the jaw bone problems.

What can you do?

I advise my patients that although there is no way to completely eliminate the risk of ONJ, there are ways to minimize the risk. My best advice is to schedule a dental appointment before you begin your osteoporosis treatment.

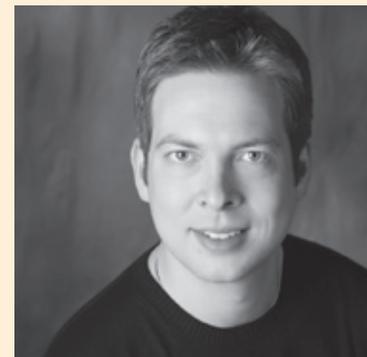
All dental disease should be resolved and elective surgical procedures performed prior to the initiation of medication. This includes the treatment of periodontal disease, the removal of hopeless teeth, and the placement of dental implants.

In general, for patients already taking oral bisphosphonates, routine dental treatment should not be affected by the medication. The risk of ONJ becomes relevant when a procedure that involves manipulation of the bone is performed. This includes tooth removal, dental implant placement, or the surgical management of periodontal disease. Experts on this topic have given advice to dentists on how to modify treatment to lower the risks of ONJ when these procedures are necessary. Also, maintaining good oral hygiene with regular dental care will lower the chance of having problems in the future.

Do your research

If you're taking an oral bisphosphonate, my advice is to do some research for yourself before you see your dentist. Go to the American Dental Association Web page at www.ada.org/public/topics/osteoporosis_medications.asp. Then question your dentist until you're satisfied he or she is totally familiar with this issue. No matter how your dentist decides to treat you, make sure that decision is an informed one. U

PHOTO: THOMAS BALSAMO



Thomas Jackson, DDS, is advanced-trained in periodontics and periodontal prosthesis. Dr. Jackson is a board-certified periodontist and the founder of the Chicago Center for Cosmetic & Implant Dentistry. He lectures nationally and internationally on issues relating to dental implants and cosmetics. Dr. Jackson is an associate professor at Northwestern University's Feinberg School of Medicine, and he may be reached at 847-842-6900.