

OSTEOPOROSIS, FOSAMAX® AND DENTISTRY

Fosamax® is a drug that is chemically classified as a bisphosphonate. Presently, millions of patients are on bisphosphonate drug therapy. Fosamax® is the 35th most prescribed medication in this country from over 4,000 drugs on the market. Most of these oral medications are used to prevent bone loss due to osteoporosis. Other drugs in this classification include: Aredia®, Actonel®, Zometa®, Didronel® and Boniva®.

You may ask what does this have to do with dentistry? There have been relatively recent reports of increased cases of osteonecrosis of the jaw (ONJ) or death of the jawbone with patients who are on bisphosphonate drug therapy. While the percent of patients that have developed ONJ taking oral bisphosphonates has been minimal, there is a risk. There is also no reliable way to assess who is at risk for ONJ.

The mechanism of why ONJ occurs is not clearly understood. The bisphosphonates increase the mineralization of bone to prevent fractures of the bone or spine. Too much mineralization can occur because the half-life of Fosamax® (the time it takes the body to remove half the therapeutic dose of a medication) is ten years. It has been postulated that because of this increased mineralization, new blood vessel formation within the bone may be inhibited. When the bone becomes traumatized, such as following a tooth extraction, the natural reparative process of the bone is then lost.

ONJ can exist without symptoms for weeks or months. It can mimic periodontal or other dental disease, but does not respond to traditional, antibiotic therapy. Signs of osteonecrosis include: pain, swelling or infection of the gums, poor healing, drainage of the extraction area with bits of bone being sequestered or exposed bone. It is a very painful condition and difficult, if not impossible to treat.

Dr. Gordon Strewler, M.D. of Harvard medical School, an osteoporosis treatment expert, states that there are still unanswered questions about long-term effects of osteoporosis treatments like Fosamax®. Dr. Strewler notes that there are no specific guidelines that exist for the management of patients taking oral bisphosphonates. Also, the optimal length of bisphosphonate treatment has not been established.

The general consensus is that preventive dentistry and good oral healthcare such as periodontal maintenance, early cavity detection and treatment of any dental infections to avoid unnecessary extractions are extremely important. These are still the best methods to reduce the risks and complication of osteonecrosis of the jaw as a result of taking these medications.