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## Osteoporosis and Your Oral Health

Its no secret that as we age, the health of our bones become a concern. Hips, knees, elbows... but have you ever stopped to think of your jaw?

Its true, osteoporotic people lose more teeth than similar non-osteoporodic patients. In fact, osteoporosis is the most common metabolic bone disease in the United States, affecting over ten million people. It is also worth noting that 80% of those diagnosed with osteoporosis are women. Osteoporosis is a systemic skeletal disease characterized by a reduced amount of calcium and phosphorous in bone, causing reduced strength and impairment of bone formation.

<u>Osteoporosis does not cause periodontal disease</u>, but studies do show that women with high bone mineral values retain teeth with deep periodontal recession pockets longer than women with low mineral density (osteoporosis).

A thin mandible (lower jaw bone) can easily be fractured. Additionally, placing dentures or other dental restorations becomes very difficult because there is no supporting structure. 

<u>Patients who wear dentures are more likely to have a high rate of bone resorption</u> (a breakdown of the bone which releases minerals into the blood stream). Denture wearers should be aware of all of their options. Recently, <u>new implant technology has made bone loss preventable</u>. By placing dental implants at the site of missing teeth, bone loss is minimalized, resulting in more stable, natural teeth as well as a healthier jaw. For more information about that, please request our free report on dental implants.

Did you know a deteriorating jaw bone can change your facial appearance? When there is severe bone loss, a "shrunken" look can occur. Lips and cheeks lose their support and deep wrinkles above the upper lip can appear. By keeping your jawbone strong, you are actually contributing to a healthier, younger looking facial appearance.

<u>The good news is that osteoporosis is preventable!</u> One of the leading contributors to osteoporosis is soda. <u>Excess soda consumption</u> increases phosphorous intake, which upsets the body's calcium to phosphorous ratio, affecting your bones, including your jaw. Eating a healthy, wholesome diet ensures that your body gets the vitamins and minerals it needs. Post-menopausal women may consider taking a calcium and magnesium supplement in order to keep all of your bones, including your jaw, healthy.

And of course, there all those pharmaceutical commercials we see on television. But can they really help your dental health? No, as the dental community is finding out.

## Bisphosphonates and the Jaw Bone

Bisphosphonates are a class of drug that inhibits resorption of the bone. You are probably familiar with some of these drugs, which include <u>FOSAMAX\*</u>, <u>BONIVA\*</u>, <u>ACTONEL\* and ZOMETA\*</u>. In 2004 through 2005, 22 million prescriptions for Fosamax were dispensed. However, studies are beginning to show that these drugs may actually lead to a dangerous

condition called osteonecrosis of the jaw (ONJ). Osteonecrosis ("bone death") is linked with the temporary loss of blood to bone tissue, leading to an eventual collapse of the bone. The problem doesn't appear to be as serious with oral bisphosphonates as with the IV form.

ONJ may be asymptomatic throughout the early stages of development. It can be several weeks or months before a patient will begin to notice the symptoms, which can include; loose teeth, exposed bone, jaw/gum pain, swelling or infection, jaw numbness and dramatic gum loss. The pain associated with ONJ is said to be comparable to that of arthritis.

Osteonecrosis of the jaw can typically be diagnosed through simple scans, such as tomographic (CT) and panoramic imaging. In some extreme cases a bone tissue biopsy may be ordered to rule out metastatic diseases, but it is important to note that such an exploratory surgery can result in additional complications. Cancer <u>patients being treated with IV</u> <u>bisphosphonates are much more likely to develop ONJ than patients taking oral bisphosphonates</u> for osteoporosis.

Early detection of ONJ is crucial as it gives your treatment specialist more options to work with. There is no definitive way to treat ONJ. Antibiotics can be administered to counter act infections associated with the disease. Removable appliances can be used to protect exposed areas of the jawbone. In extreme cases, necrotic tissue can be removed, but surgical risks and complications can be severe.

It is important to be aware that in some cases, the symptoms of ONJ can mimic dental and periodontal disease. Routine dental and periodontal treatments will not resolve these symptoms.

So, what can you do about ONJ?

- X Always maintain an open line of communication with your health care providers.

  Make sure to disclose any use of bisphosphonates to your dental team so they can determine which treatments would best benefit you. Also get dental treatment plans approved by your treating medical physicians.
- X Maintain a vigilant oral hygiene routine. Good oral hygiene along with regular dental care is the best way to lower risk.

If you have any questions, or would like to schedule an oral health examination, please call our office at 718 667 1075.