



# OMS

# QUARTERLY

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**BRIAN SIMPSON, D.M.D. DIPLOMATE OF THE AMERICAN BOARD OF ORAL & MAXILLOFACIAL SURGERY**  
113 NORTH MIDDLETOWN ROAD NANUET NY 10954 (845) 623-3497 FAX (845) 623-4039 [www.drbrriansimpson.com](http://www.drbrriansimpson.com)

## Update on Bisphosphonate-Related Osteonecrosis of the Jaw

In the June 2008 edition of the *OMS Quarterly*, Bisphosphonate-Related Osteonecrosis of the Jaw (BRONJ) was first reviewed from the position paper of the AAOMS (see [www.drbrriansimpson.com](http://www.drbrriansimpson.com), click on newsletters). Recently, there was an update in the *Journal of Oral and Maxillofacial Surgery* (volume 67, number 5, 2009).

Bisphosphonates are used in the treatment of hypercalcemic states. They are involved with getting the calcium out of the blood and back into the bone. "Although bisphosphonates have not been shown to improve cancer specific survival, they have had a significant positive effect on the quality of life for patients with advanced

cancer involving the skeleton." "By far the most prevalent and common indication, however, is osteoporosis."

"Epidemiologic studies have established a compelling, albeit circumstantial, association between IV bisphosphonates and BRONJ in the setting of malignant disease. These studies have shown the more potent the bisphosphonates and the longer it is taken, the more likely that BRONJ will develop. The causal association between oral and IV bisphosphonates for treating osteoporosis and BRONJ is much more difficult to establish."

The exact mechanism for the cause of the disease remains unknown.

"The clinical efficacy of IV bisphosphonates for the treatment of hypercalcemia and bone metastases is well established. The clinical efficacy of oral bisphosphonates for the treatment of osteoporosis/osteopenia is well established and is reflected in the fact that more than 190 million oral bisphosphonate prescriptions have been dispensed worldwide."

"Patients receiving oral bisphosphonate therapy are at a considerably lower risk of BRONJ than cancer patients treated with monthly IV bisphosphonates. According to the data from the manufacturer of the oral medication alendronate (Merck) the incidence of BRONJ was calculated to be 0.7/100,000 person years of exposure."

*continued on reverse*

### Dental Fun Fact

#### DID YOU KNOW THAT...

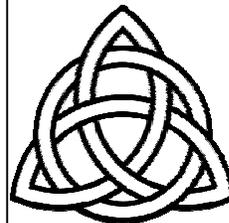
Dental floss is an ancient invention.

Researchers have found dental floss and toothpick grooves in the teeth of prehistoric humans. Levi Spear Parmly (1790-1859), a New Orleans dentist is credited as being the inventor of modern dental floss (or maybe the term re-inventor would be more accurate). Parmly promoted teeth flossing with a piece of silk thread in 1815.

History of Dentistry and Dental Care

By Mary Bellis, About.com Guide

### News You Can Use



**SIMPSON  
ORAL AND  
MAXILLOFACIAL  
SURGERY**

We are proud to announce the new name of the practice:

**Simpson Oral and  
Maxillofacial Surgery**

Please check out our new logo and website

[www.drbrriansimpson.com](http://www.drbrriansimpson.com)

**BRONJ risk factors include:**

**Drug related factors:**

- increased potency
- longer duration of use

**Local factors include:**

- dentoalveolar surgery
- extractions
- dental implant placement
- periapical surgery
- periodontal surgery

**Local Anatomy:**

- tori
- mylohyoid ridge

**Demographic and systemic factors:**

- palatal tori
- cancer
- inflammatory dental disease
- increasing age
- sex is irrelevant
- whites have increased risk when compared to blacks
- genetic perturbations in single nucleotide polymorphisms in the cytochrome

P450-2c gene in multiple myeloma patients treated with IV bisphosphonates.

There does not appear to be much to prevent BRONJ in those patients taking bisphosphonates who would have developed it otherwise.

It has been suggested that discontinuation of bisphosphonate therapy for 3 to 6 months may help to decrease the risk of the disease, however as of yet no study supports or disproves

this theory. There are some reports that discontinuation of therapy can result in resolution after debridement in 6-12 months. The treatment of BRONJ remains conservative at this time with minimal surgical intervention, long term antibiotics, and discontinuation of bisphosphonates if possible.

*JOMS*, volume 67, number 5, 2009.

## **Dr. Brian Simpson**

**announces the third meeting of the**

# **NANUET IMPLANT STUDY GROUP**

**speaker: Christos Angelopoulos, DDS, PhD**

**Oral and Maxillofacial Radiologist at  
Columbia College of Dental Medicine**

## **3D IMAGING IN DENTISTRY**

**Tuesday, June 15, 2010**

**Dinner: 6:30 Presentation: 7:00 — 9:00 pm**

**Mulberry Grill 149 Main St, Nanuet, NY 10954**

**2 CE credits awarded by the Ninth District Dental Association**

**Cost: \$30.00**

**Please bring your cases and documentation  
(photos, x-rays, models) for discussion.**

**To register, contact Theresa: 845-623-3497  
or email her at [theresag@drbriansimpson.com](mailto:theresag@drbriansimpson.com)**

**Mark your calendars: September 22 meeting:  
“Treatment Options for the Edentulous Patient”  
with prosthodontist Dr. John Ruel!**

*“The man who drives further once the effort gets painful is the man who will win.” -Roger Bannister*