

ORAL SURGERY CARE



BRENT L. FLORINE, D.D.S.

Diplomate of the American Board of Oral and Maxillofacial Surgery

4151 Knob Drive, Suite 101
Eagan, MN 55122
(651) 688-8592
www.oral surgery care.com

Summer 2014

Dear Colleague,

We hope you are doing the things you dreamed about in the depths of the winter that we just endured. Please enjoy our summer newsletter. We wish to share some of the latest developments in oral surgery and implant dentistry, and to maintain open communication with your office.

Remember that the Minnesota State Board of Dentistry allows hour-for-hour credit (elective category) for self-study activities such as literature review. You just need to document the date and amount of time spent and keep in your portfolio.

We appreciate the trust you place in us by allowing us to participate in the care of your patients.



Oral Surgery Care

Regards,

Dr. Brent L. Florine

Single-dose Intra-alveolar Chlorhexidine Gel Application, Easier Surgeries, and Younger Ages are Associated with Reduced Dry Socket Risk

Haraji A, Rakhshan V. et al.
J Oral Maxillofac Surg. 2014 Feb;72(2):259-65

Although dry socket (DS) is commonly investigated, many of its risk factors remain highly controversial. In addition, few studies are available to show the preventive effect of chlorhexidine gel on DS. Moreover, analyses of DS risk factors are scarce, and their interactions have not been assessed previously. Therefore, the simultaneous effect of chlorhexidine gel and 4 DS risk factors and their interactions were analyzed in this study. Using a split-mouth randomized clinical trial design, the investigators enrolled a cohort of

patients requiring extraction of 2 mandibular third molars. The primary predictor variable was extraction socket treatment status, classified as experimental or standard.

Experimental treatment was the insertion of chlorhexidine gel (0.2%) into the extraction socket. Each patient had 1 third molar randomly selected as the treatment site. The contralateral third molar served as the control socket and was treated in the usual manner. The primary outcome variable was DS status, present or absent, assessed on postoperative day 3. Other study variables were categorized as demographic, smoking, and surgical difficulty according to the Pederson scale. Appropriate statistics analyses were used to measure the association between risk for DS and chlorhexidine gel use, age, gender, smoking, and surgical difficulty and their interactions. The sample consisted of 90 bilateral extraction sockets in 45 patients (24 men; 21 smokers; mean age, 21.1).

Results found that when other factors and their interactions were controlled for, chlorhexidine gel application lowered the risk of DS. Increasing age was associated with an increased risk for DS. A similar association existed between increased difficulty level of extraction and DS risk. The effect of gender was marginally significant, whereas smoking did not have a significant influence. *Intra-alveolar application of chlorhexidine gel and practicing less traumatic surgeries are advocated, particularly in older patients. Smoking seems unlikely to affect DS frequency.*

Dr. Brent Florine received his undergrad degree from the University of Minnesota College of Liberal Arts and attended the University of Minnesota School of Dentistry. He received postgraduate



dental and oral and maxillofacial surgery training at Louisiana State University and Charity Hospital in New Orleans, and the University of Minnesota Hospitals and Clinics. He is certified as a Diplomate of the American Board of Oral and Maxillofacial Surgery and has practiced oral surgery in Eagan since 1987.

Correlation Between Schneiderian Membrane Perforation and Sinus Lift Graft Outcome: a Retrospective Evaluation of 359 Augmented Sinus

Nolan PJ, Freeman K, et al.
J Oral Maxillofac Surg. 2014 Jan;72(1):47-52

The purpose of this study was to estimate the incidence of sinus membrane perforation in maxillary sinus augmentation surgery using a lateral approach and the impact of sinus integrity on incidence of sinusitis and bone graft survival in the maxillary sinus. A total of 359 sinus augmentation procedures (208 patients) were evaluated retrospectively for sinus integrity during augmentation, complications, graft failure, and implant loss.

The incidence of sinus membrane perforation was 41%. There was an overall sinus graft failure rate of 6.7%; of the failed sinus grafts, 70.8% had a perforated sinus membrane at augmentation. There were 11.3% of sinuses with perforated membranes at graft placement that failed compared with 3.4% of sinuses with intact membranes failing (general linear model [GLM]). Age, gender, and provider type were not significantly associated with sinus integrity at 1 year.

Overall, 11.3% of sinuses with perforated membranes at graft placement required secondary antibiotics for sinusitis and infection compared with 1.4% of sinuses with intact membranes (GLM, P). Of the sinuses requiring secondary antibiotics, 30% failed compared with 5% of untreated sinuses (GLM). Of the sinuses developing sinusitis or secondary infection requiring antibiotics, 85% had a membrane perforation during augmentation compared with 39.2% of those not requiring antibiotics; gender, age, and provider were not associated with antibiotic use. *In the present study, antibiotic use for postoperative sinusitis and infection and graft failure were shown to be statistically higher in sinuses with perforated membranes at augmentation.*

Pentoxifylline and Tocopherol in the Treatment of Yearly Zoledronic Acid-related Osteonecrosis of the Jaw in a Corticosteroid-induced Osteoporosis

Magremanne M, Reychler H.
J Oral Maxillofac Surg. 2014 Feb;72(2):334-7

Osteonecrosis of the jaw (ONJ) is a well-known side effect of bisphosphonate (BP) therapy. ONJ is specifically related to the intravenous form of BPs and is usually seen in combination with other risk

factors, such as dental surgery, concurrent corticosteroids, chemotherapy, and tobacco use. The risk of developing ONJ in patients treated with oral BPs for osteoporosis is lower than that in patients with cancer but is still significant. Zoledronic acid is a third-generation nitrogen-containing BP. It was first used in the treatment of malignancy as a monthly infusion and then approved for the treatment of osteoporosis as a yearly infusion and is an attractive option that is more reliable than the oral form.

ONJ related to the use of yearly zoledronic acid is rarely reported in the literature and is most likely underestimated. Pentoxifylline and tocopherol have been used in the treatment of osteoradionecrosis for many years, with observed lesion improvement. *The authors present a case of ONJ development after 3 yearly zoledronic acid infusions for corticosteroid-induced osteoporosis. The patient was successfully managed using conservative treatment with pentoxifylline and tocopherol.*

Nonsteroidal Anti-inflammatory Drugs and Antihypertensives: How Do They Relate?

Khatchadourian ZD, Moreno-Hay I, et al.
Oral Surg Oral Med Oral Pathol Oral Radiol. 2014 Jun;117(6):697-703

Nonsteroidal anti-inflammatory drugs (NSAIDs) are widely available as over-the-counter medications, despite their numerous side effects and drug interactions. The purpose of this article was to increase awareness of the hypertensive potential of NSAIDs and their interference with antihypertensives. Patients with hypertension appear to be more susceptible than normotensive individuals to the blood pressure-increasing effect of NSAIDs.

Most studies have found that short-term use of NSAIDs does not pose a major risk for hypertension or increase in cardiovascular disease in healthy individuals. The calcium channel blockers and β -blockers seem to be least affected by the concomitant use of NSAIDs. A dentist must weigh the benefits and disadvantages of using NSAIDs in patients taking antihypertensive drugs. *For those who may be at greater risk, such as patients with hypertension and the elderly, careful selection of the class of NSAID and close monitoring are appropriate measures, especially if long-term use is anticipated.*

ORAL SURGERY CARE ► (651) 688-8592

 **BRENT L. FLORINE, D.D.S.**
4151 Knob Drive, Suite 101
Eagan, MN 55122
www.oralurgerycare.com