



Midwest Society of Periodontology Newsletter

Spring 2006

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**Midwest Society of
Periodontology
2006 - 2007
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Executive Committee**

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Ann Arbor, MI

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President Message:

Spring is finally around the corner and this is a moment that we have been waiting for, especially in the Midwest. Winter is slowly fading away and it is exciting to see Spring sprouting all around us. This is often the time that we set the tune for the remaining year. Some of us have made certain plans for the year ahead and are looking forward to accomplishing them. Spring is a time that many families explore the beauty of nature. We can journey through harbors and beaches in the south or west; walk through parks, vineyards, beautiful gardens and farms; tour museums, historic sites, and magnificent architecture, play sports events with our families, friends and colleagues; and much more. May you find many fond memories and much happiness in your Spring activities this year. I know we can always find excuses for not doing all these. But, I believe this will be the year we can all look forward and enjoy the life ahead of us.

I would like to take this opportunity to express my sincere appreciation to all of you for giving me the privilege of serving you on behalf of MSP. It has been more than 21 years since I attended my first MSP meeting. I am very proud to say that I have always found this to be one of the meetings that I enjoy the most. The only time I missed attending this meeting was last year because of the birth of my daughter, Sabrina. This meeting gives me an opportunity to share my thoughts with my Midwest colleagues, chat with graduate students from other programs, attend the MSP graduate student research competition to identify future stars, exchange my ideas with exhibitors, and most important of all is seeing all of you and continuing our friendship. I encourage each of you to make this meeting the one you cannot miss each year and I believe you will find the same rewards as I have over these past 20 years.

On behalf of the Midwest Society, I would like to thank our past president, Catherine Bishop, for her leadership, hard work and devotion to MSP. I would also like to thank all of the executive team, as well as George Mandelaris (meeting program Chair), Tae-Ju Oh (Chair of Graduate Student Research Forum) and Thomas Schneider (Chair of Luncheon for Learning) for making this year's meeting successful. A special thanks goes to Ken Krebs (Executive Director) for his endless support of our society. If you would like to find out more about our society, please visit our newly improved MSP website at www.msperio.org.



Award to Past President



At the February meeting of the Midwest Society of Periodontology Dr. Hom-Lay Wang, Ann Arbor, MI presents Dr. Catherine Bishop, Moline, IL with a plaque of appreciation for her successful year as president of the organization. Dr. Wang will assume the presidency for 2006-2007

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Next years' MSP meeting is February 23-25, 2007 with the theme "Advanced Implant Therapy". Three outstanding speakers: Lyndon Cooper (prosthodontist), Paul Fugazzotto (Periodontist) and Hee-Moon Kyung (Orthodontist) will share their years of experience with us. Furthermore, on Friday, a one day hands-on workshop on "Piezosurgery" will be conducted by Thomaso Vercellotti, MD., DDS. I know you won't want to miss this great opportunity, so please make your plans early. I look forward to seeing all of you next year in Chicago.

Warmest Regards,

Hom-Lay Wang

AAP Elections

Don't forget to vote in the upcoming AAP election. You should receive your ballot on or about June 1 and have until July 1 to vote.

JoAnne Rummelhart is running for her second term on the American Board of Periodontology Nominating Committee. Her opponent is Stephen Meraw.

Jim Hinrichs and Georgia Johnson are running for Directors for the American Board of Periodontology. There are four candidates and you can vote for two.

Your vote is extremely important so please support the candidate of your choice. Vote on line or send your ballot in early so it does not get buried on your desk!!

GENERAL MEETING SUPPORT

We want to express our thanks to the exhibitors who support the Midwest Society of Periodontology by participating at our annual meeting. We appreciate their support of our organization.

Ace Surgical Supply
Astra Tech
BioHorizons
BTI of North America
Densply Friident CeraMed
Denx
G. Hartzell & Son
3i Implant Innovations, Inc.
Lexi-Comp, Inc
Lifecore Biomedical
Materialise
Nobel Biocare
Osteohealth Co.
Predictable Surgical Technologies (PST)
Rocky Mountain Tissue Bank
Salvin Dental Specialties, Inc.
Straumann USA
Thommen Medical USA, L.L.C
Treloar & Heisel, Inc.
W.L. Gore & Associates, Inc
XCPT, Inc
Zimmer Dental

THANK YOU!

Graduate Student Research Forum



At the February meeting of the Midwest Society of Periodontology in Chicago, the finalists were all presented plaques and \$500 checks by Yoshie Whan of Sunstar, Inc., second from left. Dr. Tae-Ju Oh, far right, was Chairperson of the Research Forum. Standing to the left of Mrs. Whan is Dr. Paul Jang, University of Illinois, runner up.

To the immediate right of Mrs. Whan is Dr. Sang-Hoon Park, University of Michigan, the winner of the Forum. To his right is Dr. Hamad A. Alzoman, The Ohio State University, also a runner up. Dr. Sang-Hoon Park's winning paper was entitled "COMPARISON OF TWO BARRIER MEMBRANES FOR SANDWICH-BONE AUGMENTATION"

The Midwest Society Wishes to Acknowledge

Colgate Oral Pharmaceuticals is a major underwriter of the scientific session for the annual meeting. They also sponsored a Friday program on Inflammation that was very well attended. Their support helps the society provide the continuing education necessary for an outstanding meeting. Thank you Colgate.

Sunstar Butler is the major underwriter of the Graduate Student Research Forum and the Awards Ceremony. Their support enables the Society to foster interest among graduate students in periodontics and provides a most enjoyable awards ceremony. Thank you Sunstar.

Straumann USA supplied the notebooks for the meeting. The Society appreciates their contribution

The program Booklets were provided by Astra Tech Dental Implants. Thank you Astra Tech

The Midwest Society of Periodontology Graduate Student Research Forum

(Sponsored by Sunstar, Inc)

Winner

Dr. Sang-Hoon Park - University of Michigan

"COMPARISON OF TWO BARRIER MEMBRANES FOR SANDWICH BONE AUGMENTATION"

Honorable Mention

Dr. Hamad A. Alzoman - The Ohio State University

"OSTEOPROTEGERIN INHIBITS PERIODONTAL ALVEOLAR BONE LOSS IN SUSCEPTIBLE ANIMALS"

Dr. Paul Jang - University of Illinois

"RELATIONSHIP BETWEEN HIV INFECTION AND TOOTH LOSS"

Reserve These Dates!!

Midwest Society of
Periodontology
50th Annual Meeting
February 23-25, 2007

New Members:

All members and officers express a hearty welcome to each new member
and look forward to your participation in the Society

Dr. John Bissell, Yokosuka Japan
Dr. Ali Fakhry, Iowa City IA
Dr. Basel Hajjar, Crown Point IN
Dr. Mitchell Kaplan, Ann Arbor MI
Dr. Scott Sazima, Westlake OH
Dr. Edward Segal, Northbrook IL

Dr. Karin Stockman-Mortensen, Elgin IL
Dr. Thomas Shaw, Wauwatosa WI
Dr. Simon MacNeill, Kansas City MO
Dr. Leyvee Cabanilla, Dearborn MI
Dr. Abbey Sayed, Bloomfield Hills MI



The Midwest Society of Periodontology

2738 Birchwood Ave.
Wilmette, IL 60091

Reserve These Dates!!

Midwest Society of Periodontology
50th Annual Meeting
February 23-25, 2007

RESEARCH FORUM ABSTRACTS

COMPARISON OF TWO BARRIER MEMBRANES FOR SANDWICH BONE AUGMENTATION

Sang-Hoon Park, Tae-Ju Oh, and Hom-Lay Wang,
University of Michigan, Ann Arbor, MI

OBJECTIVES: This study was conducted to compare different barrier membranes for the treatment of implant buccal dehiscence defects.

METHODS: Twenty-seven implant-associated buccal dehiscence defects in 23 patients were grafted with layers of bone grafts according to the concept of the sandwich bone augmentation technique, mineralized human cancellous allograft (inner layer) and mineralized human cortical allograft (outer layer). They were randomly assigned to three groups: bovine type-I collagen membrane (BX); acellular dermal matrix (ADM); and no membrane (control). Measurements at baseline and 6 months re-entry included defect height (DH: from smooth-rough junction to the most apical part of the defect), defect width (DW: at the widest part of the defect) and defect depth (DD: at three different locations – smooth-rough junction, middle, and most apical portion of the defect). All measurements were taken from a reference stent. Statistics were performed with independent sample t-test, one-way ANOVA, a repeated measures ANOVA, and two-way ANOVA for comparisons.

RESULTS: All the implants placed were successfully osseointegrated. Defect height at baseline for three groups were not statistically significant ($p = 0.858$). Mean % defect height reduction for ADM, BME, and control groups at 6 months were $73.9 \pm 17.6\%$, $68.1 \pm 30.1\%$, and $63.6 \pm 23.9\%$, respectively, with no statistical significant difference ($p = 0.686$). Mean bone thickness gain, however, was significantly greater for membrane groups (1.7 mm for ADM, 1.6 mm for BME) compared to the control group (1.0 mm, $p = 0.044$). Membrane/Implant exposure resulted in statistically and clinically significant reduction in total height gain ($79.1 \pm 14.3\%$ vs. $57.0 \pm 23.5\%$, $p = 0.021$).

CONCLUSIONS: The study found that sites treated with membranes had greater gain in bone thickness compared to sites without a barrier. Within the limits of the study, it was concluded that both the collagen and acellular dermal matrix membranes were capable in promoting bone regeneration.

OSTEOPROTEGERIN INHIBITS PERIODONTAL ALVEOLAR BONE LOSS IN SUSCEPTIBLE ANIMALS

H.A. ALZOMAN, and D.N. TATAKIS,
The Ohio State University, Columbus, USA

OBJECTIVES: HLA-B27 transgenic (TG) rats have been shown to experience accelerated alveolar bone loss (ABL), compared to control (WT) F344 rats. The purpose of this study was to examine the potential effect of osteoprotegerin (OPG) on both the naturally occurring ABL in this model and on the possible ovariectomy-induced ABL.

METHODS: 46 female, 7-8 week old, TG rats and 52, age- and sex-matched WT rats were used. Half of the TG and WT rats were ovariectomized (OVX) and half were sham-ovariectomized (SHAM). Animals were then randomized to receive either vehicle (PBS) or recombinant human osteoprotegerin (rhOPG, Amgen). rhOPG (5 mg/kg) or PBS was administered twice weekly via SC bolus injection and animals were sacrificed at 6 or 9 months of age. After sacrifice, defleshed heads were stained to locate the cemento-enamel junction and ABL was measured as exposed molar root surface area (mm²) as previously described (J Periodontol 2000;71:1395-1400). Blinded measurements were performed using a computer assisted image analysis system.

RESULTS: Both OVX and SHAM TG rats experienced greater ABL than corresponding WT controls ($p < 0.0001$). Animals sacrificed at 9 months of age had greater ABL than those sacrificed at 6 months of age ($p < 0.001$). rhOPG significantly reduced ABL in both TG and WT rats ($p < 0.001$). However, there was no significant difference in ABL between OVX and SHAM animals ($p > 0.05$). Multiple regression analysis indicated that only strain (TG, WT), age at death, and treatment (rhOPG, PBS) were significant factors for ABL.

CONCLUSIONS: Results are consistent with previous reports of increased ABL in TG rats. Ovariectomy does not compound the ABL observed in this model or in WT rats. The significant reduction in ABL by rhOPG suggests that rhOPG merits further study as a possible treatment modality for inhibition of periodontal bone loss in humans.

Supported by OSU COD

RELATIONSHIP BETWEEN HIV INFECTION AND TOOTH LOSS

Paul Jang¹, Joseph Califano¹, Viana Grace², Phillip Marucha¹, and Mario Alves.¹ ¹Dept. of Periodontics, College of Dentistry and ²Dept. of Orthodontics, College of Dentistry, University of Illinois at Chicago

OBJECTIVES: Several studies have investigated the prevalence of periodontitis in HIV infected patients. The potential for HIV infection as a risk factor for tooth loss has not yet been reported in the literature. We hypothesize HIV positive patients experience greater tooth loss when compared to systemically healthy patients.

METHODS: 193 HIV-positive patients and age, race, gender, and smoking status matched control group consisting of 192 HIV-negative patients were evaluated by data contained in their dental record including oral exam findings, radiographs and medical history. Only patients who had been in periodontal maintenance for 2 or more years were included in the study. The relationship of the number of teeth missing and age, race, gender, compliance with dental care, CD4 cell count, viral load, smoking, use of anti-retroviral therapy, use of IV drug, and other systemic diseases was determined using Analysis of Covariance. $P < 0.05$ was used as the cutoff for statistical significance.

RESULTS: The number of missing teeth before dental treatment for test group was 3.62 ± 0.355 (mean \pm standard error) and 4.01 ± 0.427 for control group. Following treatment, the number of missing teeth was 4.28 ± 0.400 for test group and 4.61 ± 0.471 for control group. At the end of the 2-year maintenance period, the number of missing teeth was 4.50 ± 0.421 for test group and 4.78 ± 0.479 for control group. Preliminary results indicate that tooth loss was not statistically different between HIV-positive and HIV-negative groups before dental treatment, after dental treatment and during the 2-year maintenance period. There was a significant relationship between age and tooth loss in the HIV-positive group.

CONCLUSIONS: Within the limitation of our study, HIV infection does not appear to be a risk factor for tooth loss. We did not find any association between tooth loss and CD4 cell count or viral load. We conclude that HIV-positive patients will not have greater tooth loss when compared to a HIV negative population if they are well maintained.