GREATER COLUMBUS PERIODONTICS
RYAN J. SERRA, DMD, MS
Practice Limited to Periodontics
Dental Implants

JUNE 2015 NEWSLETTER

UPCOMING CE— Oral Pathology: The good, the bad, and the ugly with Dr. Kristin McNamara

Participants in this course will be guided through a variety of cases of oral and maxillofacial pathology. Disorders will be reviewed based on their clinical manifestations and will be arranged in a differential diagnoses format. Emphasis will be placed on the recognition and management of common oral lesions and clinically differentiating these lesions from more serious conditions.

Dr. Kristin McNamara is an Assistant Professor in the Division of Oral and Maxillofacial Pathology and Radiology at The Ohio State University, College of Dentistry. She is a Diplomate of the American Board of Oral & Maxillofacial Pathology and enjoys a broad scope of practice, providing clinical consultation for referral patients and participating in an active biopsy service. She is a member of the Biomedical Sciences Institutional Review Board at The Ohio State University and serves on the executive council for the American Academy of Oral and Maxillofacial Pathology. She has published multiple refereed articles and abstracts and is a peer reviewer for several scholarly journals.

This course is offered at no cost to any member of your team and participants will receive 2.0 hours of C.E. credit

August 26, 5:45 PM

The Ohio State Golf Course Clubhouse
3605 Tremont Road
Columbus, Ohio
Dinner will be Provided

To RSVP, please contact our office by August 19:
(614) 451-1122
Or online at: www.greatercolumbusperio.com/ce.html

PERIODONTAL PROGNOSIS—A NOVEL EVIDENCE BASED SCORING INDEX

PD Miller Jr., M McEntire, N Marlow et al, "An Evidenced-Based Scoring Index to Determine the Periodontal Prognosis on Molars," *Journal of Periodontology*; Vol 85; No 2, 214-225.

Determining prognosis is one of the most important functions undertaken in clinical practice. Some clinicians describe assigning periodontal prognosis as an "art based on a science," particularly when addressing multi rooted teeth. Recently, PD Miller *et al* published an evidence based method for establishing periodontal prognosis to provide clinicians a simplified classification system for multi rooted teeth. Data were gathered on 816 molars in 102 patients with moderate-to-severe periodontitis. The six factors evaluated (age, probing depth, mobility, furcation involvement, smoking, and molar type) were assigned a numeric score based on statistical analysis. The sum of the scores for all factors was used to determine the prognosis score for each molar. Only patients with all first and second molars at the initial examination qualified for the study. All patients were evaluated a minimum of 15 years after treatment.

Scores are assigned for each of the following factors:

1. Patients aged <40 years = 0 and patients aged ≥40 years = 1.
2. PD, not clinical attachment loss, was scored because clinical attachment level (CAL) was not a commonly recorded examination finding when the study began in 1969. The deepest PD of six probing sites on a molar was used to determine the PD score: <5 mm= 0; 5 to 7 mm = 1; 8 to 10 mm = 2; and >10 mm = 3.
3. Mobility was scored as follows: No mobility = 0; Class I mobility = 1; Class II = 2; and Class III = 3. A new and simplified mobility classification was used to determine mobility and was defined as follows:
    a. Class I: a tooth is mobile but, in the opinion of the clinician, the mobility is not affecting prognosis
    b. Class II: a tooth is mobile and, in the opinion of the clinician, the level of the mobility is affecting prognosis
    c. Class III: a tooth is mobile and, although perhaps considered hopeless, may be treated under certain circumstances and maintained
4. For furcation involvement, the severity of a furcation was not assessed; just the presence of a furcation involvement was used for scoring. In other words, if the concavity of a furcation was detected, it was scored as a furcation involvement as follows:
    a. No furcation involvement = 0; one furcation = 1; two furcations = 2; and three furcations on maxillary molars or through-and-through furcations on mandibular molars = 3.
5. For molar type, molars were scored as follows: mandibular first and second molars = 0; maxillary first molars = 1; and maxillary second molars = 2

Statistical analysis found that smoking had the largest effect (hazards ratio [HR] = 3.46, 95% CI = 2.04 to 5.88). Second was PD (HR = 2.20, 95% CI = 1.69 to 2.88), followed by mobility (HR = 2.08, 95% CI = 1.45 to 2.99) and furcation involvement (HR = 1.21, 95% CI = 1.01 to 1.45).

In the present study, the presence of furcation involvements was less significant when compared with other studies. McGuire and Nunn (1996) Dannewitz et al (2006) and Konig et al (2002) concluded that increased furcation involvement significantly reduces molar survivorship. Only the presence of furcation involvements was scored, not the severity. Therefore, the impact of their severity could not be analyzed in the statistical models. Other studies have demonstrated that Hamp grade III through and through furcation involvement is associated with much less favorable prognosis.

Conclusions

In the present study, 78.3% of the molars treated were never extracted and survived for an average of 24.2 years. They had an initial prognosis score of 4.32. Molars extracted during active treatment (3.9%) had a score of 8.34, whereas molars extracted during preventive maintenance (17.7%) had an initial score of 6.54 and were maintained on average for 15.4 years before they were extracted.