Dear Colleague:

Each year we continue to see growth and development in our practice accompanied by an increase in treatment success. Because of the continued growth, we have added a new associate to our practice – Dr. Megan Robl. She looks forward to the opportunity to care for your patients, and we would love to set up a time for you to meet her personally. Please feel free to reach out to Christina at our Dallas location or Jessie at our Plano location to schedule a time to do so at your convenience. Through this quarterly newsletter, we wish to share with you some of the latest developments in oral surgery and implant dentistry, as well as open communication with your office.

If we can provide any additional information, or if you would like to see an article on a particular topic in our next issue, please do not hesitate to call. We appreciate the trust you place in us by allowing us to participate in the care of your patients.

Regards,

Dr. Megan Robl  
Dr. Steven D. Sherry  
Dr. John D. Wallace

History of Periodontitis as a Risk Factor for Long-term Survival of Dental Implants


The authors conducted a study to determine the effect of a history of periodontitis on the long-term survival of dental implants. An electronic search of PubMed and a supplemental manual search were conducted. Studies published in English through March 2013 were included in the investigation. Survival rates, success rates, periodontal status, types of periodontitis, most recent follow-up time, and other information were extracted and analyzed.

Thirteen studies involving 2,011 patients and 6,802 implants were included. The results revealed that a history of periodontitis, especially aggressive periodontitis, is associated with significantly higher risks of long-term implant failure versus a healthy periodontium. Based on the limited number of included articles, a subgroup analysis showed that a history of periodontitis had no statistically significant effect on implant survival up to 100 months of follow-up; however, it did significantly affect implant survival within a period of 101 to 200 months. Some implant systems also significantly influenced the correlation between a history of periodontitis and implant survival. Within the limitations of this study, a history of periodontitis is estimated to be a statistical risk factor for the long-term survival of dental implants. This negative effect would be most evident in patients with aggressive periodontitis, severe periodontitis, or after a longer follow-up.

Risk Factors for Permanent Injury of Inferior Alveolar and Lingual Nerves During Third Molar Surgery

Nguyen E, Grubor D, et al.  

The purpose of this study was to assess the incidence of and risk factors for permanent neurologic injuries to the inferior alveolar nerve (IAN) or lingual nerve (LN) after the removal of third molars. This report also describes the use of a Clinical Incident Review (CIR) process, allowing close monitoring of all patients with neurologic injuries as a result of dentoalveolar surgery. A database associated with a CIR process at the Royal Dental Hospital of Melbourne from January 2006 through December 2009 was assessed. Factors assessed included gender, age, operator class, method of anesthesia, spatial relation, depth of impaction, ramus relation, proximity of the IAN on orthopantomogram, cone-beam computed tomographic usage, and side of injury.

During this 4-year period, 11,599 lower third molars were removed in 6,803 patients. The incidence of an IAN injury was 0.68%, and the incidence of an LN injury was 0.15%. Important risk factors for

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**Risk Factors....continued**

permanent IAN injury were increasing age, surgery performed by staff dentists, type of anesthesia, and mesioangular impactions. The mean time of complete resolution was 4.3 months. No factors were found to statistically increase the risk of LN injury, although most injuries were seen in patients with a distoangular impaction. The overall incidences of IAN and LN injuries were low. Some risk factors for permanent IAN nerve injury were identified. **Important risk factors for permanent IAN injury were increasing age (≥25 yr old), surgery performed by staff dentists, surgery under general anesthesia, and mesioangular impaction. No factors were found to statistically increase the risk of LN injury.**

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**Pain with Pericoronitis Affects Quality of Life**

Magraw CB, Golden B, et al.


The purpose of this study was to assess the association between patients' pericoronitis pain symptoms and quality-of-life (QOL) outcomes for lifestyle and oral function. Patients from the American Society of Anesthesiologists health risk assessment level I or II with mild symptoms of pericoronitis were enrolled. In this study approved by the institutional review board, patients were asked to complete a QOL instrument specifically for third molar problems covering lifestyle, oral function, and pain. Subjects assessed lifestyle and oral function using a 5-point Likert-type scale, ranging from "no trouble" (score, 1) to "lots of trouble" (score, 5), and worst and average pain using a 7-point Likert-type scale, ranging from "no pain" (score, 1) to "worst pain imaginable" (score, 7). Pain levels reported at enrollment were compared with QOL outcomes for lifestyle and oral function using appropriate statistical analysis. Correlations of at least 0.6 were considered clinically quite important, and correlations of at least 0.4 were considered clinically important. Associations between these outcome measurements were considered statistically significant.

Most of the 113 subjects were Caucasian (51%), women (56%), 23 years old or younger (58%), and well educated (91% with at least some college). Mean pain levels ± standard deviation were low (worst pain, 3.3; average pain, 2.4). All pain outcomes were significantly associated with items in the lifestyle and oral function domains. **Clinically important correlations were seen between pain outcomes and daily routine, social life, eating a regular diet, chewing food, and talking. Clinically important correlations existed between subjects' pericoronitis pain and lifestyle and oral function, associations not often considered by clinicians or policy makers.**

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**Patient Knowledge and Expectations Prior to Receiving Implant-Supported Restorations**

Simensen AN, Bee OE, et al.


Implant dentistry has revolutionized the treatment of partially and completely edentulous patients. The purposes of this study were to explore what made patients choose implant treatment and their prior knowledge and expectations of this treatment option. A study population of 117 subjects was selected from 248 referred possible candidates for implant therapy. The subjects answered a questionnaire regarding implant dentistry prior to professional consultation at two hospital/university-based centers and one private implant center.

In most cases, the choice of treatment was motivated by expectations of improved chewing/function (46.0%), appearance (19.5%), or both (18.6%). Improved chewing/function and improved appearance were rated "very important" by 96.5% and 86.1% of patients, respectively. Surprisingly, 57.4% reported that the cost of treatment did not play a role in their decision. Only 6.0% claimed to have much prior knowledge about the treatment and 33.6% had a realistic perception about the length of anticipated service. Patients first received implant-related information primarily (62.9%) from dentists, and 75.2% thought their dentist gave the most useful information. Significant positive associations were found between knowledge about the treatment, the need for periodic professional oral health maintenance, and expected treatment time. The authors found that patients seek implant therapy primarily to improve chewing function and esthetics, whereas cost seems to be less important. Prior to treatment, many patients lack precise information on the importance of necessary implant-related hygiene measures and implant longevity. The general dentist is the primary source of information.