Dear Colleague:

Each year we continue to see growth and development in our practice accompanied by an increase in treatment success. 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. Rupi Dhadli

Patient Knowledge and Expectations Prior to Receiving Implant-Supported Restorations

Simensen AN, Bøe 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.

Effect of History of Periodontitis on Implant Success

Ramanauskaite A, Baseviciene N, et al.

Implant Dent. 2014 Dec;23(6):687-96

The purpose of this study was to determine if there is a relationship between history of periodontitis and dental implant success (used marginal bone loss [MBL] as the assessment criteria) and survival rates. A PubMed search was continued on page 2

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**Periodontitis...continued**

performed in the period between 2002 and 2012. Studies qualified for the inclusion should have ≥5 years follow-up and reported the incidence of peri-implantitis and/or implant survival and/or MBL in patients with and without a history of periodontitis. A meta-analysis was performed using the random-effects model on the selected qualified articles.

All the 14 studies showed better implant survival rates for non-periodontitis patients’ group. Six of 10 studies reported statistically significantly higher MBL and prevalence of peri-implantitis among periodontitis patients. The authors’ meta-analysis did not find implant survival rates to be significantly lower among periodontitis patients but revealed a history of periodontitis to be significantly related to the higher prevalence of peri-implantitis. There is no difference, in terms of implant survival rate, between periodontitis and non-periodontitis patients. However, patients with a history of periodontitis had lower implant success rate (more MBL and incidence of peri-implantitis) when compared with non-periodontitis patients.

**Effect of Dental Implants on Bisphosphonate-related Osteonecrosis of the Jaws**


Bisphosphonate (BP)-related osteonecrosis of the jaw (BRONJ) is a side effect of BP therapy. Dental implants are believed to be a risk factor for developing BRONJ. In the present study, the authors analyzed the interval to the development of BRONJ in patients treated with BP who had received dental implants. Patients with dental implants and established BRONJ were evaluated at the oral and maxillofacial surgery department (Medical University of Vienna). In addition, studies from 1978 to 2012 were included in a meta-analysis. Three groups were created: implantation before BP treatment, implantation after BP treatment, and implantation during BP treatment. The outcomes were evaluated using appropriate statistical analysis.

Patients who underwent dental implantation during and after treatment with BPs developed BRONJ more rapidly. The treatment duration with oral BPs was significantly related to the rapidity of developing BRONJ. The insertion of dental implants during or after BP treatment accelerated the development of BRONJ. BRONJ occurred less frequently when the implants had been inserted before BP therapy had been started.

**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.