

Are Dental Implants a Panacea or Should We Better Strive to Save Teeth?

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Dental implants have become an important treatment for the replacement of teeth lost due to disease, injury, or congenital tooth agenesis (Adell et al. 1990). Over the past 30 years, the incorporation of dental implants into everyday clinical dental practice has resulted in major improvements in oral health of our patients through enhancements in function, esthetics, and phonetics. In this month's issue of the *Journal*, we highlight new evidence on the biological complications of dental implants and the great challenges associated with predictable implant therapy. These adverse outcomes associated with implants have come to the forefront of discussion groups in periodontology, oral surgery, prosthodontics, and implant dentistry relating not only to prosthetic (technical) failure but also persistent infections surrounding implants. A recent systematic review based on a European consensus conference revealed that the prevalence of peri-implant mucositis and peri-implantitis ranges from 19% to 65% (Derks and Tomsai 2015). This month, results from one of the largest studies performed in Sweden show that peri-implantitis and peri-implant mucositis are common biological complications of implant therapy (Derks et al. 2016) that may jeopardize the longevity of reconstructions on implants. Tarnow (2016) comments on how far we have come in implant dentistry while at the same time recognizing the influence on success of implant placements by generalists, specialists, and different implant configurations/surfaces. One finds that reconstructive therapy of peri-implantitis lesions is unpredictable as yet when compared to surgical resection, as evidenced by recent investigations and systematic reviews (Khoshkam et al. 2013; Carcuac et al. 2016; Jepsen et al. 2016).

A trend affecting clinical practice over the past 2 decades has been the reduced emphasis to “save compromised teeth.” In fact, studies have demonstrated that those with less training in periodontology and implant dentistry generally apply reduced efforts in addressing tooth retention (Lang-Hua et al. 2014). It is noted that less trained individuals are often recommending tooth extraction versus retention. As such, many teeth are being condemned at early stages given the expediency that lends itself to quickly rid a problematic tooth and provide a new tooth replacement implant. It is not unusual for many practitioners to recommend tooth extraction with modest tooth-associated ailments such as caries, need for endodontic therapy, or periodontal involvement. There are many scenarios where patients are advised to get rid of the compromised tooth and get the “newer, better” implant. It has recently been advocated that practice patterns should change to retain more teeth

given the excellent long-term track record of successful therapy for tooth preservation (Axelsson and Lindhe 1981; Lindhe and Pacey 2014). It is acknowledged that in many clinical situations, advanced diseases such as caries and periodontitis render teeth hopeless, requiring implant prosthetic solutions to rehabilitate patients. Most all dental implant systems are susceptible to peri-implant biological complications (Derks et al. 2015). These complications result in very difficult to treat options, including local mechanical therapy and antibiotics, resective surgery, regeneration, or, in a large number of cases, removal. The erroneous belief of implants yielding a better long-term prognosis has now clearly been rejected in several comparative studies and systematic reviews. Teeth even compromised because of periodontal disease or endodontic problems may have a longevity that surpasses by far that of the average implant (Carnevale et al. 1998; Hardt et al. 2002; Lang and Zitzmann 2012; Salvi et al. 2014; Klinge et al. 2015).

This dialogue can be a call to action to revisit the long history of success of tooth maintenance to preserve the natural dentition without the rush to extract teeth and replace with implants. We do a disservice to our patients and ourselves without carefully weighing the advantages and disadvantages of such options in providing the optimal oral health care delivery to our patients. We have been trained to preserve teeth. Let us face the challenge. If we select an “early removal of compromised teeth” paradigm, the dental profession will lose most of its expertise in preserving a functional dentition for a lifetime.

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