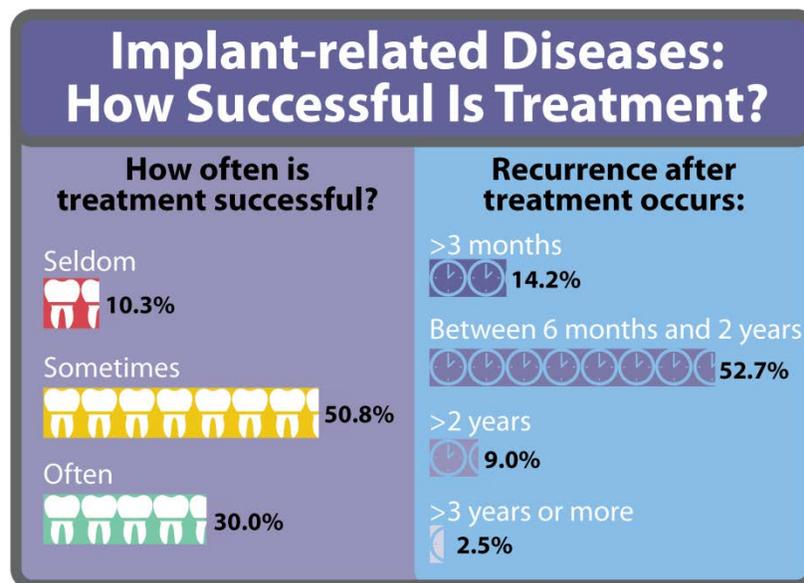


Quick Poll Results—Implant-related Diseases Tricky to Treat

Dentists are increasing their use of dental implants in lieu of traditional fixed and removable dental prostheses to replace missing teeth. Implant-related diseases, which are sometimes difficult to treat, are becoming a greater concern for dentists.

In our National Dental PBRN quick poll of dentists and hygienists, half of the 308 respondents said their treatment of perimucositis and peri-implantitis is successful about 50 percent of the time. Only 30 percent of respondents said treatment is successful often (about 75 percent of the time).



Moreover, almost half of our respondents said about 50 percent of peri-implantitis cases recur, while slightly more than one-quarter—26 percent—of respondents seldom see a recurrence. Peri-implantitis tends to recur between six months and two years, respondents reported.

The frequency of perimucositis and peri-implantitis varies among practices. Almost 68 percent of our respondents said the two conditions affect less than 10 percent of their implant patients, while 21 percent reported incidences ranging from 10 percent to 25 percent.

These numbers are interesting when compared to results from a long-term study by Derks and colleagues. The researchers noted that of 425 patients with implants and baseline radiographs, 98 (23 percent) showed no signs of peri-implantitis, 137 (32 percent) exhibited only peri-implant mucositis and 192 (45 percent) presented with peri-implantitis.

- Thus 45 percent had peri-implantitis, defined as bleeding on probing, suppuration, and bone loss greater than 0.5 mm.
- 14 percent had moderate/severe peri-implantitis, described as bleeding on probing, suppuration, and bone loss greater than 2 mm.
- Most cases of peri-implantitis started within 3 years.

Interestingly, moderate/severe peri-implantitis was seen more often in patients also having:

- periodontitis
- patients with more than four implants
- specific brands of implants
- prosthetic therapy delivered by general practitioners.

In several recent studies, the bacterial compositions between periodontal defects and peri-implant defects have been shown to differ, implying that the causative bacteria are also different. However, Derks' study finds that patients with a history of periodontal disease also showed an increased incidence of peri-implant disease.

The most common treatments our poll respondents reported using are scaling and planing (50 percent), followed by antibiotics (50 percent) and surgery (28 percent). (Respondents could check more than one treatment approach.) About 43 percent used other approaches.

In another 2016 study, Carcuac and colleagues examined factors that affect success of surgical treatment of severe peri-implantitis.

- Success was much more likely on implants with a non-modified surface (79 percent) versus those with a modified surface (34 percent).
- The use of chlorhexidine had no overall effect.
- Giving patients antibiotics didn't improve success of implants with a non-modified surface and only slightly improved the success of implants with a modified surface.



Our poll and other studies show the importance of peri-implant maintenance therapy (PIMT) for disease prevention. A 2016 systematic review and meta-analysis by Monje and colleagues of 23 clinical trials supported the use of PIMT “to potentially prevent biologic complications and hence to heighten the long-term success rate,” the authors wrote.

To continue the conversation, go to Quick Poll Results in the [Member Forum](#).

Edited by Drs. Josephine Esquivel-Upshaw and Arthur E. Clark

Monje A, Aranda L, Diaz KT, Alarcón MA, Bagramian RA, Wang HL, Catena A. [Impact of Maintenance Therapy for the Prevention of Peri-implant Diseases: A Systematic Review and Meta-analysis](#). *Journal of Dental Research*. 2016;95(4):372-379.

Carcuac O, Derks J, Charalampakis G, Abrahamsson I, Wennstrom JL, Berglundh T. [Adjunctive Systemic and Local Antimicrobial Therapy in the Surgical Treatment of Peri-implantitis: A Randomized Controlled Clinical Trial](#). *Journal of Dental Research*. 2016; 95(1)50-57.

Derks J, Schaller D, Håkansson J, Wennström JL, Tomasi C, Berglundh T. [Effectiveness of Implant Therapy Analyzed in a Swedish Population: Prevalence of Peri-implantitis](#). *Journal of Dental Research*. 2016; 95(1):43-49.