



BOOK REVIEW

Peri-implant therapy for the dental hygienist

Authored by Susan S. Wingrove. 2013, Wiley-Blackwell. 196 pages, soft cover. ISBN 978-0-470-96285-5.

This is the first book about peri-implant therapy written for the dental hygienist by an experienced dental hygienist. Susan S. Wingrove is an international lecturer (trainer and clinical advisor) and has published papers on implant therapy, regeneration and advanced instrumentation. As an instrument designer for Paradise Dental Technologies Inc., she developed the Wingrove Titanium Series, ACE probed and Queen of Hearts instruments. Three contributing authors are dentists affiliated with different Universities in the US.

The dental hygienist has a critical role in maintaining the general dental and medical health of dentate patients, and this role will expand even more as an increased number of dental implants are placed and restored and the population ages. Ailing or failing dental implants, due to poor oral hygiene or lack of appropriate follow-up, may lead to possible health issues due to the unaddressed peri-implantitis. Therefore, there was a need for an evidence-based textbook regarding this topic for the dental hygienist.

The book has many illustrations with full colour pictures, drawings in addition to summary tables and boxes. All illustrations provide courtesy details of the clinicians and corporate industries that have contributed. In perspective of the reviewers, not all illustrations contribute to the text and the clinical pictures in many instances are not of a high quality. Following each chapter, a summary is provided, and as an appendix, the relevant terminology is briefly explained.

To provide a background for the topic to be discussed, chapter 1 starts with a thorough overview of dental implant history starting in the ancient history with the Maya's 600 AD. The evolution of various implants designs is discussed from subperiosteal, transosteal, blade, up to the current used titanium screw-type forms and potentially interesting zirconia implants. Chapters 2–5, which provide overviews concerning patient selection, the differences between implants and natural teeth, the surgical procedures and communication with the patient, are interesting to read.

In Chapter 6, the controversial use of a probe around implants is discussed. A positive emphasis is placed on the important role of a periodontal probe in the early diagnosis of peri-implant inflammation. Due to the complexity of current implant designs (platform-switching, narrow implants, fixed prosthesis), the author recommends a flexible plastic probe that closely follows the anatomy of the implant. Also, reducing the potential trauma to the mucosal seal by using a light

probing force is pointed out. Unfortunately, the existence of a plastic probe with pressure control, such as the Kerr Have Neos clickprobe[®], (Kerr Corporation, Orange, CA, USA) is not mentioned which seems at present to be the most appropriate diagnostic tool available on the market. In the book, several pictures are used, showing a metal probe instead of flexible plastic probe being used which is in contradiction with the text.

Chapter 8 has a promising title: *Implant Home Care is Key*. This should also be *the key* chapter for the purpose of this book offering tools for the daily practice regarding instructing patients for the home care of implants. In this chapter, the most common although limited available scientific literature is missing. Instructions for instance on flossing are based on the authors' own experience and are not supported by any evidence. Also, advocating the use of Soft picks[®] (Sunstar; Sunstar Suisse S.A., Etoy, Switzerland), a soft rubber bristle interdental cleaner, does not have any scientific basis.

The reviewers realize that there is indeed limited scientific literature regarding the self care of dental implants. Subsequently, the results as we know them from natural teeth are leading at present. The suggestion of using floss in a criss-cross manner or using a 'shoe-shine' motion is in conflict with this line of thought because this is never instructed around natural teeth, that is, even besides the fact that there is limited evidence to support the use of floss altogether (1, 2).

Also, the use of specifically *non-alcohol* mouthwashes is mentioned. There is no scientific evidence to exclude the use of alcohol-containing mouthwashes (3), and for instance, for Listerine the benefit of long-term use has clearly been demonstrated (4–6).

In the final chapter 9, options for In-office Implant maintenance are presented. In this chapter, the titanium curettes as designed by the author are promoted. There is no scientific support for this. Titanium curettes have been shown to induce changes on the titanium implant surface, especially the smooth ones, which may be considered unwanted. Furthermore, the cleaning efficacy of these instruments requires further investigation (7–9) and chemical cleaning of implant surfaces is not discussed (10). This chapter appears to provide tips and tricks out of the authors' own daily practice. More scientific literature and position papers are available which could have been used in writing this chapter.

Considering the fact that this is the first book on peri-implant maintenance written for the dental hygienist, it may serve as a first step towards developing protocols for daily practice. However, based on the currently available scientific

literature, this book could have been improved from 'practice based' to 'evidence based'.

Conflict of interest and source of funding statement

The authors declare that they have no conflict of interest. The authors published unfunded studies on the field of implantology. This review was self-funded by the authors and their institutions.

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