

The power of ultrasonics

Authored by van der Weijden F (Editor).
 Quintessence Publishing Co. Ltd
 Quintessence House, Grafton Road, New Malden
 2007, 80 pages,
 ISBN: 978-2-912550-51-4,
 US\$48/£28.
 Available at: info@quit.pub.co.uk

The meticulous cleaning of subgingival root surfaces is not an easy task and sonic and ultrasonic mechanical scalers can be of help for the operator to obtain good treatment results. The cleaning effect is due to the vibrations of the ultrasonic tip which are transmitted to the root and tooth surface. The author presents many reasons why ultrasonic instruments can be superior to hand instruments.

After a short history, the various mechanical scalers (sonic, ultrasonic magneto-strictive and ultrasonic piëzo-electric) and their modes of action are described. However, the focus of the book is on ultrasonic equipment since most of the research has been carried out with mechanical scalers. Important issues discussed are: the cooling of the tips, cavitation, the effects on the tooth and surrounding tissues, the aerosols, and the need for effective infection control. Of particular interest is the review of the clinic effect of hand instruments versus mechanical scalers. One of the advantages is the slim tips which ease the access in the molar furcations in comparison with the curettes.

Possible side-effects are discussed extensively including the effect on operators' hands (studies so far have not shown any negative effects), hearing (permanent hearing loss has not yet been described) and contraindications. A chapter has been devoted to the correct application of ultrasonic instruments and many different scaler tips are described.

In systematic treatment with mechanical scalers, differentiation is made between the treatment of a periodontal patient and maintenance care, how to sit, and how to use the scalers.

Guidelines for the use of ultrasonic instruments are very handy for students and beginners.

In separate chapters, 'New developments' and 'Dental applications outside periodontal therapy' are addressed which make interesting reading.

The book is interesting for students and the dental team. The information is given in a condensed way and the text is easy to read.

Marjolijn Hovius
Dental Hygiene Program, School of Health,
Inholland University for Applied Sciences,
Louwesweg1, 1066 EA Amsterdam,
the Netherlands
 E-mail: marjolijn.hovius@inholland.acta.nl

Copyright of International Journal of Dental Hygiene is the property of Blackwell Publishing Limited and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.