

Book Reviews

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Biological mechanisms of tooth movement

Editors: Vinod Krishnan and Ze'ev Davidovitch,

Publisher: John Wiley & Sons Limited, Chichester, West Sussex, UK,

Price: £99.50,

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A textbook solely devoted to biological mechanisms of tooth movement is now available for the orthodontic community. A topic usually confined to single chapters in orthodontic textbooks, or presented in up-to-date review articles, has now received its proper attention. An international team of expert contributors, including the editors, 'have generously and without hesitation shared their valuable knowledge and wisdom' and created a classic reference book.

The book is divided into 12 chapters. It starts with an overview of the evolution of biological concepts in orthodontics and a brief review of the biological responses to orthodontic forces. Further, in-depth information is given on key topics such as genetic influences, the role of inflammation, bone biology, and the characterization of gingival crevicular fluid in orthodontic patients. The effect of systematic diseases, drugs, and diet on orthodontic tooth movement is covered in Chapters 8 and 9 giving full support to the notion that teeth are not separate entities, but integral parts of the human body. The chapter on optimal orthodontic forces and how they are applied failed to meet my

expectations. It promotes the 'amalgamated technique' through case reports, rather than dealing with research on optimum force magnitude. The comprehensive review of the current, though scarce, knowledge of the biological background of relapse of orthodontic tooth movement is a real jewel. The last chapter, as expected, deals with the iatrogenic damage of orthodontic treatment, how to minimize this, and, eventually, how to avoid further complications.

This large-format hardback textbook is well designed and illustrated throughout. Being one of the 'initiated', I enjoyed every single page of the book and consider it as a real treat. However, practitioners must not be put off by the book's title, as its contents prove to be a 'scientific spice' in the library of every orthodontist and is highly recommended. To quote the editors: '... the time is approaching when the nature of optimal orthodontics will be fully exposed as a consequence of the increasing widening of the highway connecting clinical and basic sciences ...'.

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