

Endodontic Advances and Evidence-based Clinical Guidelines

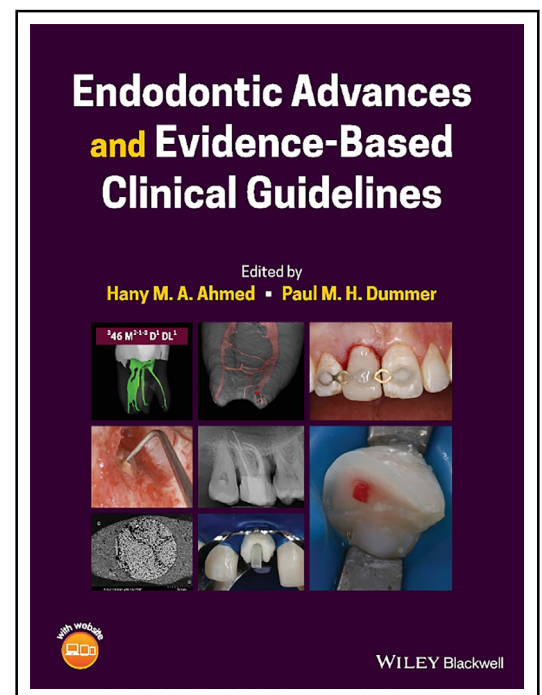
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When the reader first glances through the book (1), he/she will be impressed by the volume (just over 800 pages), the excellent printing quality, the numerous high-quality colour figures, the paper quality and the invariably outstanding documentation of radiographs and clinical pictures of the clinical cases that have been included. The expectations raised are not disappointed on closer inspection of this book. The editors of great renown, Dr. Ahmed is currently the Deputy Editor-in-Chief of the *European Endodontic Journal* and Prof. Dummer is the former Editor-in-Chief of the *International Endodontic Journal*, succeeded in attracting proven experts as authors for each chapter – the list of contributors reads like a “who’s who” in endodontics!

The book is logically and didactically skilful divided into four main parts: “Advances in Knowledge” with eight chapters, “Advances in Materials and Technology” with seven chapters, “Advances in Clinical Management” with ten chapters and “Evidence-based Clinical Guidelines” with five chapters. Each chapter is supplemented by a very extensive reference list. The didactically excellent presentation of the core statements of each chapter by means of tables, illustrations or lists of the key points are worthy of note. This makes it much easier to read and quickly grasp the relevant aspects of each topic.

The first part deals with the basics of endodontics, such as tooth and root anatomy (including the recently suggested new coding system for root and root canal morphology), microbiological aspects of endodontic infections, root resorption and the conditions of the pulp and periradicular tissues. It is particularly pleasing that topics that are not considered in most other textbooks, or are at best touched on superficially, have their own chapter. In this context, the highly interesting chapter on bioactive properties of dentine and molecular mechanisms of



pulp regeneration as well as the chapter on technology enhanced education deserve attention. Also worth reading is the chapter on systemic health and endodontics. This topic will most definitely gain in importance in the future as the number of medically compromised patients in need of endodontic treatment will inevitably increase in the coming years, and the authors succeeded in correcting many false claims about possible correlations between general medical diseases and endodontic infections.

The second part focuses on materials and technologies in endodontics and covers topics from computed tomography imaging, working length determination and microbial control as well as different aspects of root canal preparation, considering metallurgical aspects of nickel-titanium alloys as well as kinematics and physical properties of engine-driven root canal

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instruments. Remarkably enough, it is a pleasure to see that basic electronical aspects of electronical root canal measurement and the electronical features of tooth structures are well and profoundly explained, allowing the reader to fully understand the mechanisms and limitations of electronic apex locators. Likewise, this part is rounded off by two current and highly relevant topics, namely hydraulic calcium silicate-based cements and nanomaterials in endodontics. Particularly the latter topic is seldom considered in comparable endodontic textbooks.

The third part deals with a range of clinical treatment concepts in endodontics comprising vital pulp treatment, access cavity preparation with detection of canal orifices and negotiation of narrow and calcified canals, management of perforations, non-surgical retreatment, post-endodontic restoration and surgical endodontics. Besides these "classical" topics, again, separate chapters are dedicated to topics that are often neglected in other texts. To be mentioned here are the well-illustrated and informative chapters on the management of fractured instruments and the management of discoloured teeth. In all chapters the clinical procedures are described step-by-step with numerous helpful and valuable hints for the practitioners. One very minor point of criticism is that a small number of the included radiographs appear underexposed. Prior to publication, postprocessing to improve brightness and radiographic contrast would have been desirable. However, this in no way adversely affects the overall impression of the book.

The fourth part is a big hint, summarising the yet available clinical guidelines in endodontics. In the era of evidence-based

medicine, the five chapters of the final part can be highly recommended: Endodontic diagnosis, use of cone-beam computed tomography, endodontic emergencies and systemic administration of antibiotics, revitalisation and dental trauma. Especially the recommendations on systemic antibiotic treatment in conjunction with endodontic therapy are valuable and, hopefully, will help to reduce the over-administration of antibiotics. Finally, the chapter on traumatic dental injuries can be warmly recommended as there is still a great deal of uncertainty about these treatment concepts in daily dental practice. Hopefully, when preparing the desirable second edition of this textbook, the part on evidence-based guidelines will be supplemented by the forthcoming S3-Guidelines of the European Society of Endodontology on the treatment of pulpal and apical disease.

In summary, "*Endodontic Advances and Evidence-Based Clinical Guidelines*" is an extremely interesting, high-quality textbook that will bring great joy to any reader interested in endodontics. Due to its strengths and unique features, this book should be regarded as a "must-have" for any specialist in endodontics and for all practitioners with a main focus on and a keen interest in endodontics. Moreover, postgraduate students and junior scientists will easily find a multitude of information regarding different topics they desperately searched for in previous endodontic textbooks. Thus, without doubt, a clear recommendation for purchase!

REFERENCE

1. Ahmed HM, Dummer PM, editors. Endodontic Advances and Evidence-based Clinical Guidelines. John Wiley & Sons; 2022. [CrossRef]