



**Edition:** 1st Edition 2013  
**pages:** 216  
**Images:** 60  
**Cover:** Hardcover  
**ISBN:** 978-0-86715-586-0  
**Published:** March 2013

#### KVM - Der Medizinverlag

📍 Ifenpfad 2-4  
12107 Berlin  
Germany

☎ +49 (0) 30 / 76180-5

📠 +49 (0) 30 / 76180-680

✉ info@quintessenz.de

🌐 <https://www.quintessence-publishing.com/kvm/de>

## Book information

**Editor:** Greene, Charles S. / Laskin, Daniel M.  
**Title:** Treatment of TMDs  
**Subtitle:** Bridging the Gap Between Advances in Research and Clinical Patient Management

#### Short text:

This book is focused on answering a single broad question: What is currently happening in various research areas that will be clinically applicable to the management of temporomandibular disorders (TMDs) in the near future? Clearly, much of the information discovered about musculoskeletal disorders through the application of new research tools and innovative experimental designs can be directly or indirectly applied to the TMJ. However, many dental clinicians are unaware of this type of information because it is presented mainly in medical publications or nonclinical scientific journals. This book bridges the gap for the clinician, applying the latest scientific research to the clinical treatment of TMDs, with focus on the anatomy, biochemistry, neurophysiology, and psychology of the common disorders. Each chapter discusses present knowledge in the particular field before explaining how it may apply to the diagnosis and treatment of TMD patients. In addition, every chapter provides an overview of new research in the field and its potential for changing future patient care. Covering such clinically relevant topics as the relation of abnormal joint function to joint pathology, the prediction of treatment responsiveness, how sleep disorders affect TMJ and facial pain, the role of comorbid conditions in pain response and management, and the evolving field of pharmacotherapeutics, this book is sure to transform the way clinicians think about TMDs and how they approach TMD treatment.

#### Contents

Section I. Understanding Regional and Widespread Pain Phenomena

Chapter 01. Sensory Mechanisms of Orofacial Pain

Chapter 02. Pathophysiology of Masticatory Myofascial Pain

Chapter 03. Pathophysiology of Intracapsular Inflammation and Degeneration

Chapter 04. Comorbid Conditions: How They Affect Orofacial Pain

Chapter 05. How Sleep and Pain Affect Each Other

Section II. Assessing Susceptibility to Pain Development and Chronicity

Chapter 06. Genetic Determinants of Complex Orofacial Pain Conditions

Chapter 07. Quantitative Sensory Testing of Pain Responsiveness

Chapter 08. Predicting Treatment Responsiveness: Somatic and Psychologic Factors

Section III. Biomechanics of TMJ Function

Chapter 09. Biomechanics and Mechanobiology of the TMJ

Chapter 10. Finite Element Analysis of the TMJ

Chapter 11. Lubrication of the TMJ

Section IV. Diagnostic Technology

Chapter 12. Imaging of the TMJ and Associated Structures

Chapter 13. Brain Imaging of Pain Phenomena

Chapter 14. Synovial Fluid Analysis and Biomarkers of TMJ Disease

Section V. Therapeutic Advances

Chapter 15. Developmental and Evolutionary Perspectives on TMJ Tissue Engineering

Chapter 16. Injectable Compounds to Treat TMJ Pain and Degenerative Joint Disease

Chapter 17. Pharmacologic Management of TMD Pain

#### Contributors

R. Benoliel • M. Carra • D. Chen • R. Delcanho • T. Diekwisch • R. Dubner • E. Eliav • R. Emshoff • J. Friction • L. Gallo • G. Gerstner • D. Hatcher • J. Hu • E. Ichesco • J. H. Koolstra • R. Landesberg • S. Lauer • G. Lavigne • T. List • G. Macaluso • D. Nitzan • R. Ohrbach • S. Palla • D. Reed • K. Ren • C. Ross • R. Scapino • T. Schmidt-Wilcke • S.

Schug • P. Schweinhardt • B. Sessle • C. Stohler • P. Svensson • A. Velly • S. Wadhwa • Y. Zadik • S. Zhu

**Categories:** Functional Therapy