

TMDs: An Evidence-based Approach to Diagnosis and Treatment

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According to the preface, this book is a continuation of the tradition of 4 previous books edited by Sarnat and Laskin, namely to invite basic scientists and clinicians with special expertise in temporomandibular disorders (TMDs) to summarize the current status of the field. The evidence-based approach, however, is new to this edition.

The book contains 36 chapters and is organized in 2 parts, "Biological Basis" and "Clinical Management." Both parts are further divided into sections made up by the different chapters. Thus, this is a comprehensive book (548 pages) covering a broad range of topics regarding not only TMDs but also associated disorders, such as fibromyalgia, movement disorders, and tumors in the region.

Beginning with anatomy and function, the book starts in a conventional way, with 4 chapters dealing with the functional anatomy of the jaw structures, temporomandibular joint (TMJ) growth, and adaptive changes as well as the neurophysiology of the TMJ. Unfortunately, there is overlap between the first 2 chapters, "Functional Anatomy and Biomechanics of the Masticatory Apparatus" and "Anatomy and Function of the TMJ." It might have been a better choice to include one chapter about anatomy and function and another about biomechanics.

The second section in the first part contains 5 chapters about the pathophysiology of TMDs. The 3 chapters about TMJ pathology, ie, "TMJ Osteoarthritis," "TMJ Disc Derangements," and "Systemic Conditions Affecting the TMJ" cover these topics adequately, but the latter might have been more focused on pathophysiologic mechanisms. The chapter about muscle pain merely discusses the effect of pain on motor function, ie, the vicious cycle model versus the pain adaptation model. Lacking is a section about the etiological and pathophysiologic mechanisms behind the development of myalgia, comparable to the chapters about TMJ pathology.

Part II, Clinical Management, begins with a section titled "Diagnostic Modalities" and includes 4 chapters, "TMJ Imaging," "Analysis of TMJ Synovial Fluid," "The Role of Technology in TMD Diagnosis," and "Psychological and Psychosocial Assessment." Not only are the diagnostic methods currently in use described, but the evidence supporting their use is also critically reviewed.

The chapters in the second section of Part II, "Diagnosis," describe TMDs from a clinical point of view. A new approach that will be appreciated by readers is the inclusion of chapters dealing with coexisting disorders, such as fibromyalgia and whiplash-associated disorders (included in the chapter "Traumatic Injuries"). A future edition might also include a separate chapter about headaches. These are briefly outlined in the chapter "Differential Diagnoses of Orofacial Pain," but due to the common comorbidity of primary headaches and TMDs, the topic deserves a chapter of its own comparable to the chapter on fibromyalgia.

The first of the last 2 sections is devoted to therapeutic modalities. Here the evidence supporting a broad range of treatment modalities, such as oral appliances and biobehavioral therapy, is discussed. The last section contains 8 chapters about evidence-based medical and surgical treatment of specific TMD conditions as well as chapters about treatment of congenital and developmental anomalies, maxillofacial movement disorders, and neoplasms and idiopathic condylar resorption.

There are quite a few textbooks about orofacial pain and TMDs on the market. Do we really need another one? In my opinion the answer is definitely yes! This book will be of value for orofacial pain clinicians, orofacial specialist training, and anyone interested in the current knowledge about TMDs. On the negative side, there is some unnecessary overlap between chapters, evidently the effect of different authors being invited to write chapters with similar titles and contents.

The various chapters are illustrated with many figures and tables, including many in color, which add to the cost of the book but also facilitate reading. In conclusion, this is a good book to have close at hand for current information about TMDs. My hope is that the book will be updated in many future editions so that one can always find evidence-based knowledge about TMDs.

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