

## Book Reviews

### Brain and Oral Function: Oral Motor Function and Dysfunction (1995)

T. Morimoto T. Matsuya and K. Takada (Eds)

Publisher: Elsevier Science, Amsterdam, The Netherlands

Price: Dfl. 435.00 US\$ 272.00

ISBN 0-444-81963-0

This book contains an elaborate selection of papers from the Osaka International Oral Physiology Symposium on Brain and Oral Function held in 1994.

All papers presented at this symposium focus on orofacial function and dysfunction from a neuroscience viewpoint and can be divided into seven subsections: (1) histochemistry and contractile properties of the muscle fibres of the masticatory muscles; (2) periodontal sensation and its contribution to the control of the masticatory muscles; (3) central connections of muscle spindle afferents and the reflex control of masticatory force; (4) central rhythm generator of jaw and tongue movements; (5) physiological and pharmacological properties of the synapse between premotor neurons and the trigeminal motoneurons; (6) the cerebral mechanism of jaw and tongue movements; and (7) abnormal rhythmic oral movements and clinical evaluation of craniofacial motor dysfunctions.

This book is especially recommended for those performing basic research in the physiological mechanisms of jaw movements and provides insight into the control of the human masticatory muscles and jaw movements. For instance, the role of the human periodontal mechanoreceptors, electromyogram–force relationships, and right–left asymmetries in masticatory muscle activity are discussed.

For clinicians relevant papers can be found in the section dealing with temporomandibular joint and craniomandibular disorder that focus on patients with chronic orofacial pain, and the section about posture and electromyography that partly deals with sleep apnoea syndrome. The contributions about the relationships between facial morphology and jaw muscle function and oral sensation and bite force may also be of interest to orthodontists.

P. H. van Spronsen

### Orofacial Pain: Guidelines for Assessment, Diagnosis, and Management (1996)

Jeffrey P. Okeson (Ed.)

Publisher: Quintessence Publishing Co., Inc., Chicago, USA

Price: £22.00

ISBN: 0–86715–312–1

This book is the result of the continuing efforts of the American Academy of Orofacial Pain to promote excellence in education, research, and patient care in the field of orofacial pain and associated disorders. Originally a position paper describing the state of the art in the diagnosis and management of TMD (temporomandibular disorders), it has evolved in the subsequent 15

years to its newest form, a document reflecting the literature in the broader area of orofacial pain. For the current edition, the Academy decided to include sections on other pain disorders of the head and neck that are important to the orofacial pain clinician.

The book begins with an introduction to orofacial pain, including a very brief section on

epidemiology, and a brief description of the anatomical relationships, i.e. the neuroanatomy and neurophysiology of orofacial pain. There follows a description of the biopsychosocial model of disease (versus the biomedical model), and an introduction to the classification of pain into a two-level or two-axis system description: one axis depicting the physical factors and the second the psychological factors that influence the pain experience.

The second chapter deals with the assessment of orofacial pain disorder. It includes a review of the history and examination procedures, including diagnostic tests. It is emphasized that the primary source of information for an accurate diagnosis comes from the history, examination and psychological assessment. Diagnostic tests, as sources of supplementary information, are also reviewed. The emphasis in this chapter is on evaluating the supporting research data for the most common procedures. The chapter contains a description of those procedures/diagnostic tests which can be considered reasonably reliable, as well as indicating those procedures which have not been adequately tested but which hold promise.

The third chapter presents the classification of orofacial pain disorders which has been developed following collaboration with the International Headache Society and the American Academy of Orofacial Pain. This classification scheme has two primary advantages. Firstly, it integrates a TMD classification system into an existing medical diagnostic system which supports communication among health professionals within the field of orofacial pain; and secondly, it provides a diagnostic framework for research in the area of TMD.

Chapters 4–7 and 9 provide an overview of sources of facial pain other than TMD. These include intraoral pain disorders, headache, intracranial disorders, pain of neurogenic origin and pain from associated structures of the head and neck (ears, eyes, nose, paranasal sinuses etc.).

These chapters serve to emphasize that the dental orofacial pain clinician must consider a variety of sources for orofacial pain and where appropriate should refer patients to the relevant health professional.

In chapter 8, the diagnosis and management of TMD—the focus of the book—is presented. It contains a more extensive presentation of the epidemiology of TMD. This is followed by a discussion of the aetiology and a classification of TMD, including diagnostic criteria. Also included is an extended review of the management of TMD.

The final chapter is a brief discussion of the diagnosis and management of mental disorders. The emphasis is on a description of the essential features of the disorders, not on differential diagnosis. The management of the conditions is presented in only brief, generalized terms.

The book fulfils its stated goals. It provides the clinician with a view of TMD within the more generalized field of orofacial pain. Furthermore, the heart of the book—a review of the efficacy of procedures, diagnostic tests and therapies for the diagnosis and management of TMD—is clearly presented. The supporting literature is extensive and current. The citations are complete, although the style is not consistent throughout. The book is, however, not a textbook presenting instructions for the clinical application of the procedures, tests and therapies. The inclusion of more illustrations would certainly have improved the usefulness of the text.

In conclusion, the book is well suited for the interested clinician who is looking for a critical overview of the field of diagnosis and management of TMD. The classification system for TMD and the diagnostic criteria make the book especially important for researchers in the field. The quality of the discussion and the presentation of the broader field of orofacial pain certainly recommends the book for inclusion in graduate level courses on TMD.

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