Temporomandibular Foint

Function and Dysfunction

EDITORS

GEORGE A. ZARB & GUNNAR E. CARLSSON

MOSBY

Temporomandibular Joint Function and Dysfunction

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Preface

Tony Melcher first conceived the idea of Oral Sciences Reviews with the aim of publishing comprehensive and analytical reviews in fields related to clinical and experimental odontology. Three of the ten published OSR monographs dealt with TMJ function and dysfunction and elicited very favourable responses, attesting to the interest in the topic and its significance. We felt that if the original, updated OSR articles could be supplemented with some new chapters, we could provide a really thorough treatment of the topic. This book is the result, and it is designed for serious students of TMJ function and dysfunction.

There are many facets to the puzzle of TMJ or mandibular dysfunction. It has been studied by the various dental specialties, as well as by some medical ones, and in recent years by psychologists as well. Inevitably various approaches were used which led to studies of the clinical features, natural history of TMJ dysfunction, and later to laboratory work. The results of these approaches have often conflicted, and while vigorous debate has led to improved management of dysfunction, knowledge of the mechanism and its treatment still leave a lot to be desired.

Clinicians have long observed that most dysfunction patients gave histories which seemed like variations on a recognizable theme, but the treatment experience suggested that more than one theme must be present since the response to treatment was frequently unpredictable. Quite recently, the heterogenous or multifactorial nature of the condition has received increased attention, usurping the "one disease—one treatment" approach or conviction which has tended to prevail.

It appears that mandibular dysfunction is a musculo-skeletal disorder which involves tissue injury. The cause of the injury may be of a macro- or a micro-nature, or both, and the resulting lesions may be expressed through inflammatory, proliferative and degenerative tissue changes. Furthermore, the effects of the dysfunction often outlive the precipitating cause, with frequent development of chronic pain or discomfort. The dysfunction also involves a psychological response which is distinct but inseparable from the structural response, with an implied need for clinicians and researchers to see mandibular dysfunction in the context of a vicious circle of aetiological factors, with overlapping at both the symptom description and treatment levels.

Treatment strategies have expanded from the dental occlusal reconstructive effort to the use of drugs, electrical stimulation, biofeedback, hypnosis, acupuncture and psychological help. These "modern" alternatives have long histories. Acupuncture is ancient, electric eels have been used for pain control, and psychological help has always been a major tool of witch doctor and faith healer.

With the help of our contributors we have aimed at a comprehensive review of intelligently interpreted research in the field. We owe them an enormous debt for their scholarship and expertise, as we do to our many friends, teachers and colleagues whose ideas we have absorbed, and whose thoughts have so influenced us, that they are now indistinguishable from our own.

George A Zarb Gunnar E Carlsson