This book fulfils the need for an up-to-date extensive evidence-based text encompassing didactic and clinical fields relevant to occlusion and oral rehabilitation that reflects changing paradigms, concepts, new clinical disciplines and expanding therapeutic options.

The introduction delineates the distinction between science and the clinical art, application of the best available evidence, the scientific method and poses basic clinical questions related to the challenges of restoring the dentition and the dental occlusion.

The first section of the text covers evolution of the masticatory system, growth and development, neuromuscular physiology, orofacial pain, neuroplasticity and biopsychosocial concepts of pain and TMD. Masticatory oral function, bruxism and dysfunction, and the latest concepts of temporomandibular disorders are reviewed together with the biomechanics of the human skull.

The second section addresses fundamentals of occlusion; functional anatomy of muscles, TMJs, mandibular dynamics, the class I occlusion and fundamentals of esthetics. Natural variety of morphologic skeletal, dental, occlusal variants and occlusal interferences are covered in a separate chapter. The three major components of the masticatory system, posterior occlusal support, vertical dimension of occlusion and anterior (excursive) guidance are each addressed in separate extensive chapters reviewing each topic in depth.

The third clinical section starts with chapters on occlusion in implant dentistry and dental articulators. The following chapter presents current diagnostic and treatment planning methodologies followed by chapters on restoring class I, II, and III dentitions and aberrant jaw relations. A special chapter on esthetic perspectives features three invited international renowned clinicians presenting cases representing esthetics and the current highest state of the clinical art. Dr Stefano Gracis, Dr Inaki Gamborena and Dr Konrad Meyenberg. Further chapters detail the restoration of the periodontally involved dentition, treating and restoring severe tooth wear and bruxism, implant supported restoration and computer assisted implant planning and placement, and finally the management of temporomandibular disorders.

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Fachgebiet(e): Funktionsdiagnostik und -therapie