

BOOK REVIEW



GERONTOLOGICAL DENTAL MEDICINE,
university handbook

GERONTOSTOMATOLOGIJA, sveučilišni udžbenik
by Adnan Čatović et al., Medicinska naklada,
Zagreb, 2010, hard cover, 171 pages, 73 color figures and 17 tables.

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This hardcover book has been excellently designed by the printing house Medicinska naklada, Zagreb, Croatia. The handbook has 171 pages, 73 color figures and 17 tables distributed across particular chapters. The book consists of 14 chapters, with the index of terms at the end. The book reviewers were Professor Dragutin Komar, DDM, PhD and Professor Melita Valentić-Peruzović, DDM, PhD from the School of Dental Medicine, and Professor Anton Šmalcelj, MD, PhD from the School of Medicine, University of Zagreb. Each chapter begins with a summary,

key words, and contents, with the list of references at the end of the chapter. The price of the handbook is 190,00 HRK (150,00 HRK for students).

Professor Adnan Čatović wrote the introductory part of the book, where he presents epidemiologic data on the elderly population in the world and in Croatia. Aging as a natural process is frequently accompanied by complete edentulism, which is shown in tables with comments on various conditions of edentulism that are therapeutically more demanding. For example, stomatoprosthetic therapy is very often required in older age, as supported by data collected from Department of Gerontology, Dr. Andrija Štampar Institute of Public Health from Zagreb. These data reveal dental prostheses to be the second most common medical aid in individuals over 65 years of age, only following eyeglasses.

Chapter 2, by Professor Jagoda Roša, describes manifestations characteristic of aging at micromolecular and macromolecular level, with special reference to various theories of aging, DNA damage, telomere biology and telomerase activity that determine the process of aging.

Chapter 3, by Professor Irena Colić-Barić, is dedicated to dietary issues. The author underlines the role of oral and dental health and treatment in the elderly for correct food intake and mastication. The characteristics of particular macronutrients and micronutrients are presented, illustrated by dietary pyramid for the elderly. The chapter is concluded with tabular recommendations for problem food mastication and dietary advice for the elderly.

Chapter 4, by Professor Dalibor Krpan, deals with most common diseases associated with old age and involving the musculoskeletal system. Besides the basic bone concepts, the most important mechanisms of chronic osteoarticular disease development in the elderly are presented, along with description of osteoporosis and new concepts on bone biology.

Chapter 5, by Assist. Professor Hrvoje Pintarić, is dedicated to cardiovascular diseases in the elderly. This chapter describes the most common diseases in the elderly, such as hypertension, chronic heart failure, and various arrhythmias. At the end of the chapter, prophylaxis of infectious endocarditis, which is important in dental procedures, is presented in a table and the diseases where it is required are listed.

Chapter 6, by Academician Vida Demarin and Professor Zlatko Trkanjec, deals with neurologic disorders in the elderly. In addition to description of the most common neurologic impairments and disorders, the authors point to the associations between particular diseases and complications involving facial and oral region. This is exemplified by difficult mastication and deglutition due to musculature bradykinesia and rigor in Parkinson's disease.

Chapter 7, by the psychiatrists Professor Danijel Buljan and Iva Ivančić, MD, presents the most common psychiatric disorders and their treatment in the elderly, with special reference to the high prevalence of these disorders in this population, predominated by depression, anxiety and phobias. The prevalence of mental disorders grows rapidly after age 75.

In chapter 8, Professor Mladen Perić, deals with the issues related to local anesthesia in the elderly. The use of general and local anesthetics in the elderly requires specific approach due to physiological and pathophysiological changes in their cardiovascular and respiratory systems.

Chapter 9, by Professor Pavel Kobler, is dedicated to oral surgical diseases and therapy in the elderly. The author describes various forms of atrophy that develop in the elderly due to premature loss of teeth. Implants as an unavoidable topic are used to manage cosmetic and gnathologic problems in the elderly, in collaboration with prosthodontists.

Chapter 10, by Professor Marinka Mravak-Stipetić, is dedicated to oral medicine in the elderly, pointing to the impact of many systemic diseases, numerous medications, chemotherapy and radiotherapy on oral mucosa health and function. The author emphasizes that diseases of oral mucosa need not be the sequels of body aging.

Chapter 11, by Professor Ksenija Jorgić-Srdak, deals with periodontium diseases in the elderly. According to the author, when providing periodontal

care for the elderly, a dental medicine doctor should have good knowledge of the changes of periodontal structures induced by aging. The duration of procedure, appointment frequency and extent of therapeutic procedure should be adjusted individually.

Chapter 12, by Professor Sanja Šegović, describes lesions of hard and soft dental tissues. Specificities in the fields of cariology, restorative dentistry and endodontics characteristic of the elderly are presented. Characteristic changes in color and shape of teeth and pulpodental complex as well as errors that may occur in the management of obliterated root canals are described.

Chapter 13, by Professor Adnan Čatović, deals with fixed prosthetic therapy in the elderly, describing specificities of tooth abrasion for crown placement as the most common prosthetic substitute in combination with partial or subtotal dental prostheses in the elderly. Clinical solutions in particular cases from the field of oral rehabilitation in partially edentulous elderly patients are presented, with special reference to tooth abrasion therapy with correction of occlusion height, which should be performed gradually, with adjustment of the stomatognathic system, frequently with the use of occlusal splints.

Chapter 14, by Professor Vlado Carek, is dedicated to mobile prosthetic therapy in the elderly, as still the most common form of prosthetic therapy in this age group. The options currently available enable higher masticatory efficiency with mobile prostheses when they have to be stabilized with the infrastructure in the form of two to four implants because of unfavorable anatomic circumstances. In addition, technological problems that may be encountered by dental technician on the manufacture of prosthesis, and thus also by therapist, are presented.

In conclusion, the number of elderly patients treated daily in general and specialist dental practice is on an increase, helping them to maintain their quality of life. Therefore, I believe that this book as the first handbook on the issue in our country and beyond will certainly fulfill its main purpose, i.e. help the students in preparing for exam in this subject. It will also help dental medicine doctors sublime their knowledge in dental medicine by focusing on the specificities underlying preparation for therapeutic procedures. Thereby, all specific features of the elderly population should be

respected, including social and general health through psychological and financial ones. To medical doctors, the book will offer, through the examples presented, an insight in the need of interdisciplinary collaboration with dental medicine doctors and specialists in the treatment of elderly patients. The intention of the

book is to present the symbiosis of medical and dental medicine disciplines, which are overlapping and supplementing in the prevention and management of chronic systemic diseases and states in the elderly, including stomatognathic system diseases and states, and I think it fully meets this purpose.

Dragutin Komar

