Book review: Neurodegenerative Diseases Challenges: Early Diagnosis and Pandemics

AUHORS:

Vladimira Vuletić Daniel Rukavina

The book, titled "Neurodegenerative Diseases Challenges: Early Diagnosis and Pandemics"

is published by the Croatian Academy of Sciences and Arts, with main editors Academician Daniel Rukavina and Assist. Prof. Vladimira Vuletić. The chapters in the book are based on the proceedings held at the international Rijeka Forums of Neurogenerative diseases, which are held traditionally in autumn and have been sponsored by the European Association of Neurology.

The book is split into four main chapters titled: "Biomarkers in neurodegenerative diseases", "Early diagnosis and treatment of neurodegenerative diseases", "New challenges in neurodegenerative diseases" and "COVID-19 pandemics and consequences". The articles within the book are written by esteemed experts in the field of neurodegenerative diseases, which begins by an overview on Alzheimer's disease and the use of cerebrospinal fluid biomarkers by prof. Nenad Bogdanović and prof. Kaj Blennow. The first chapter of the book also contains articles focusing on the biomarkers of early Parkinson's disease (Assist. Prof. Vladimira Vuletić), lessons from neuropathological studies of preclinical and early neurodegenerative diseases (prof. Tamas Revesz) and metabolic brain imaging as a biomarker of an early stage of neurodegenerative diseases (prof. Maja Trošt and Matej Perovnik). Overall, the first chapter of the book presents an up-to-date overview on the biomarkers in most common neurodegenerative diseases and presents a valuable educational resource.

It is becoming clear that the early diagnosis and treatment of neurodegenerative disease is essential for improved outcomes and is the focus of the second chapter of the book. The articles focus on the early detection and treatment of multiple sclerosis (Valentino Rački, Assist. Prof. Vladimira Vuletić, prof. Sten Fredrikson), frontotemporal dementia (Antonela Blažeković and prof. Fran Borovečki) and early deep brain stimulation in Parkinson's disease (Assist. Prof. Vladimira Vuletić and prof. Darko Chudy). However, concurrent challenges of neurodegenerative diseases are not only related to early diagnosis and treatment. Thus, the third chapter of the book is based on the new challenges in neurodegenerative diseases, namely the public health genomics in Parkinson's disease (Valentino Rački, Assist. Prof. Vladimira Vuletić, Prof. Borut Peterlin) and the increasingly important lifestyle factors in prevention of cognitive decline (Academician Vida Demarin and Sandra Morović). The chapter is finished by an interesting article on overcoming challenges in clinical trials in multiple system atrophy and dementia with Lewy bodies, which is a prerequisite to novel treatment (prof. Tomislav Babić). The book is finished by a timely chapter on the current COVID-19 pandemic and the unique challenges that are present in the neurodegenerative field. The first article speaks on an often-discussed effect of the COVID-19 disease on cognition, in both para and postinfectious

HRVATSKA AKADEMIJA ZNANOSTI I UMJETNOSTI ZAVOD ZA BIOMEDICINSKE ZNANOSTI U RIJECI

NEURODEGENERATIVE DISEASES CHALLENGES: EARLY DIAGNOSIS AND PANDEMICS

Editors: Vladimira Vuletić and Daniel Rukavina



ZAGREB – RIJEKA 2021.

conditions. (Valentino Rački, Assist. Prof. Vladimira Vuletić, Prof. Nenad Bogdanović). The book is finished by two articles written by Assist. Prof. Vladimira Vuletić, first focusing on the managing of movement disorders and deep brain stimulation in patients during the COVID-19 pandemic, and the second presenting the post-covid neurological syndrome, that presents an ongoing challenge to all neurologists in daily practice.

This book has a primarily educational function. According to reviewers, it will serve healthcare professionals (and associated professions) by enriching their knowledge with up-to-date information, improving their day-to-day work and the services they provide to patients; the discussions within the book will stimulate researchers with ideas for new projects and stimulate all of us, professionals and laypeople, to change our "lifestyles" and preserve the health of our brains, as there is no health without brain health! To conclude, the book before us is a contribution to a better and concurrent knowledge of the chronic diseases of the central nervous system that affect our existence, take it and open it; on its pages, among the multitude of paragraphs and facts, each of us will find sentences written for him.