Novel ideas in sleep medicine

Sleep medicine lags behind other medical disciplines because of the complexity in neurosciences, especially in discrete brain areas related to sleep-wake mechanisms. With the advancement of biotechnology and neurobiology, new ideas have emerged in sleep medicine. For example, new imaging technique has found out that the brain GABA level was reduced in un-medicated primary insomniacs. Sleep-wake cycle disturbances may be used for early diagnosis of neurocognitive disorders with aberrant tau protein, as it was found to be a cause for the damage of neurons in patients with neurocognitive disorders leading to sleep disturbance which may be used to pathological fibrillation of alpha-synuclein protein, leading to the formation of Lewy bodies, could be prevented by monoclonal antibodies against Epstein-Barr virus, or a rosmarinic acid or cuminaldehyde. The possible biomarker of rapid-eye-movement sleep behaviour disorder (RSBD) may help in earlier diagnosis and treatment for Parkinson’s disease. This point towards a direction for future treatment of alpha-synucleinopathies including Parkinson’s Disease and their sleep problems. The central pathology may give a new direction of management for patients with Alzheimer’s disease or others with tauopathy.

Biography

Char-Nie Chen has completed his Graduation in Medicine from the National Taiwan University (NTU). He is trained in Psychiatry at NTU and St. George’s Hospital Medical School (SGHMS), UK. He completed his MSc in Department of Physiology, University College London. He was a Lecturer and Senior Lecturer in Psychiatry at SGHMS and; Founding Professor of Psychiatry, Faculty of Medicine, Chinese University of Hong Kong (CUHK) from 1981 to 1998. His professional orientation is in Psychosomatic Medicine, and he has worked on eating disorders, sleep disorders, mood disorders, substance use disorders as well as psychiatric problems in PLHIV/AIDS. Currently, he is a Clinical Professor of Psychiatry at CUHK and a Specialist in Psychiatry in Hong Kong. He is a Fellow of the Royal College of Psychiatrists, Royal Australian and New Zealand College of Psychiatrists and Past President and Honorary Fellow of the Hong Kong College of Psychiatrists.

cnc@cuhk.edu.hk