The Gut - Brain -Cognitive Movements and Skin Diseases

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ensitive skin, Rosacea and Chronic Atopic Dermatitis (AD) are prevalent skin conditions which are difficult to manage and have Da significant impact to person's quality of life and diseases burden to the community. On the surface, they look as belong to different disease category, they share similar underlying pathogenetic mechanisms. Particularly worth discussion is the association of these diseases with the widely distributed Transient Potential Receptors (TRP) channels and its associated protein interactors G Protein C Receptor (GPCR) and signalling pathways. TRP not only transduce environmental noxious signals like allergens, microbiomes, pH variations, temperature change and reactive chemicals through the defective skin barrier resulting neurogenic and non-specific inflammation but also involve in the multi-faceted manifestations of these diseases especially cognitive impairments of the Central Nervous System resulting in emotional disturbances, sleep deprivation, unhappiness and depression. This skin - cognitive pathway is well illustrated by the recalcitrant itch – scratch – cycle in chronic AD and the psychiatric co-morbidities in Rosacea with its cardiovascular and metabolic complications. Interestingly, the gut is also shown to be linked to this axis immunologically. In the lecture, the recent scientific evidences of this gut - brain - skin - motor and non-motor functional axis will be discussed with reference to the above skin conditions and Parkinson's Disease (PD).

Keywords: Sensitive skin, Rosacea and AD, TRP channels, Gut - Brain - Skin - Movement Axis, Parkinson's disease.

Biography:

Dr. Chan Kam Tim Michael is a practicing private Dermatologist in Hong Kong. He received his Fellowship from Hong Kong Academy of Medicine (FHKAM) (Medicine) as a registered Dermatologist since 1998. He received his post- doctoral training in University of California, Los Angeles (UCLA) in 1997. He is now the Vice President of the Association of Integrative Aesthetic Medicine (AIAM) in Hong Kong. In 2017, he was invited and served as editorial board member of the following International Journals: Journal of Anatomy and Physiological Studies; the Cognitive Neuroscience Journal; Research Journal of Nervous System; Medical Reports and Case Studies; Advances in Neurology and Neuroscience. He has been the Editor of Hong Kong Journal of Dermatology and Venereology from 2002 to 2007. Honorary Clinical Assistant Professor of the Faculty of Medicine in The University of Hong Kong from July 2007 to June 2009.He also fulfilled his part time lectureship in the Baptist University of Hong Kong in teaching a Master Course on Public Health and Common Goods for the Public since 2013.