Behavioral Dysexecutive syndrome after Stroke

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Dysexecutive syndrome (DES) is defined as an impairment of executive functions constituting of two domains: behavioral dysexecutive syndrome (BDES) and cognitive dysexecutive syndrome (CDES) which are not accompanied always[1]. A growing body of studies demonstrated that BDES is a common post-stroke neuropsychiatric comorbidity.

Post-stroke BDES comprises varieties of clinical presentations, the most prevalent of which are anosognosia and hypoactivity with apathy-abulia [2]. The clinical course of BDES in stroke population has not yet fully elucidated. Some studies showed that there was only a minor decrease of prevalence of BDES several month after stroke, suggesting the possible chronicity of BDES. Possible clinical correlates of behavioral symptoms in stroke are global cognitive impairment, executive dysfunction, premorbid personality and psychopathology and stroke severity.

The neuroanatomical pattern of post-stroke BDES is rarely studied. Lesion studies demonstrated that disruption to frontal-subcortical circuit (FSC) is the pivotal cause of BDES[3]. First of all, frontal lobe is treated as the key component of FSC.

To conclude, the existing literatures on BDES and stroke suggest that BDES is one of the most common post-stroke psychiatric comorbidity and a combined neuroanatomical and neurobiological lesion accounted to stroke substantially serves as the underlying mechanisms of post-stroke BDES. Standardized diagnosis criteria and a deeper understanding of the mechanism of post-stroke BDES is urgently needed, which may benefit to recognize BDES in stroke survivors as early as possible and select the appropriate treatment, therefore, result in a better outcome of stroke.

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Biography
Wai Kwong Tang was appointed as Professor in the Department of Psychiatry, Chinese University of Hong Kong in 2011. His main research area includes Addictions and Neuropsychiatry in Stroke. He has published over 100 papers in renowned journals, and has also contributed to the peer review of 40 journals. He has secured over 20 major competitive research grants, including Health and Medical Research Fund, reference number: 02130726. Health and Medical Research Fund, reference number: 01120376 and National Natural Science Foundation of China, reference number: 81371460. General Research Fund, reference number: 474513. General Research Fund, reference number: 473712. He has served in Editorial Boards of five scientific journals. He was also a recipient of the Young Researcher Award in 2007, awarded by the Chinese University of Hong Kong.

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