

3rd International Conference on **Clinical Pharmacy**

December 07-09, 2015 Atlanta, USA

Differential serum levels of ubiquitin C-terminal hydrolase-L1 between patients with or without white matter lesions

Yuyuan Li

Dalian Medical University, P R China

Ubiquitin Carboxy-Terminal Hydrolase-L1 (UCH-L1) has been established as a reliable and potential biomarker of neuronal damage. There is not much information about the effects of White Matter Lesions (WMLs) on serum UCH-L1 levels in white matter disease patients. This study was aimed to assess whether serum UCH-L1 levels are a reliable marker of brain damage in patients with WMLs. Serum levels of UCH-L1 were assessed by sandwich Enzyme-Linked Immunosorbent Assay (ELISA) in 74 patients with type 2 diabetes mellitus, depression, or vascular disease. MRI was performed by a neuro-radiologist blinded to clinical data. Of these 74 patient cases, 26 showed periventricular WMLs, 22 showed subcortical WMLs, and 26 displayed no well-defined WMLs (controls). Serum UCH-L1 levels were significantly different between the two groups ($p < 0.05$). Further sub-group analysis proved that serum UCH-L1 levels in participants with sub-cortical WMLs were significantly increased when compared with controls ($p < 0.001$), but there was no significant differences between controls and patients with periventricular WMLs ($p > 0.05$). These findings suggest that serum UCH-L1 levels may serve as a novel biomarker for neuronal damage from WMLs, especially sub-cortical WMLs.

Biography

Yuyuan Li has completed her PhD from the Ministry of Education Key Laboratory of Laser Life Science of South China Normal University. She is a Lecturer of Dalian Medical University. She has published more than 10 papers in reputed journals and has been serving as an Editorial Board Member of *Edorium Journal of Emergency Medicine*. She has been supported by National Natural Science Foundation of China, and the Educational Commission of Liaoning Province of China.

liyuyuan831221@163.com

Notes: