

PW01-80 - THE EFFECTS ON THE LEVEL OF INTESTINAL ENDOTOXEMIA IN ALZHEIMER DISEASE RATS

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Aim: The objective of the study was to explore whether IETM participate in the development of Alzheimer disease's rats which were established by D-galactose and aluminum trichloride (AlCl₃).

Methods: Adult Wistar rats were subjected to 90 days of intraperitoneal injection with D-galactose and AlCl₃ to establish the Alzheimer disease's model. After the administration, the study and memory ability of the Alzheimer disease's rats were observed by Morris water maze; The level of Lipopolysaccharide (LPS) in the sera of Alzheimer disease's rats was determined by tachypleus amebocyte lysate method; The level of tumor necrosis factor- α (TNF- α) and interleukin-1 (IL-1) in the sera of Alzheimer disease's rats were determined by radioimmunity method; The express of amyloid β -protein precursor (APP), presenilin 1 (PS1) and β -site APP-cleaving enzyme (BACE) in hippocampus of Alzheimer disease's rats were detected by RT-PCR.

Results: Compared with the normal control, the level of LPS in the sera and the express of APP, PSI, BACE mRNA in the hippocampus of Alzheimer disease's rats were markedly increased ($P < 0.01$).

Conclusions: The model of Alzheimer disease's rats which were established by D-galactose and AlCl₃ is accompanied IETM. This result suggests that IETM play an important role in the development of Alzheimer disease.

Keywords: Lipopolysaccharide; model / Alzheimer disease; D-galactose; aluminum trichloride