

Efficacy and Safety of TAU-targeted Peptide Combined with Memantine Hydrochloride in Alzheimer's Disease

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SUMMARY. Alzheimer's disease is one of the most common neurodegenerative diseases affecting the elderly worldwide, and it is also a common cause of dementia. The main pathological features of AD is the appearance of a large number of neurofibrillary tangles in nerve cells. The main component of neurofibrillary tangles is hyperphosphorylated TAU protein. It is important to study the structure and function of TAU protein and the molecular mechanism of neurofibrillary tangles. Thus, the novel peptides targeting TAU protein were designed and synthesized, and the application values of the peptides was evaluated with CKK-8 and ELISA assay.

RESUMEN. La enfermedad de Alzheimer es una de las enfermedades neurodegenerativas más comunes que afectan a los ancianos en todo el mundo, y también es una causa común de demencia. La principal característica patológica de la EA es la aparición de un gran número de ovillos neurofibrilares en las células nerviosas. El componente principal de los ovillos neurofibrilares es la proteína TAU hiperfosforilada. Es importante estudiar la estructura y función de la proteína TAU y el mecanismo molecular de los ovillos neurofibrilares. Por lo tanto, se diseñaron y sintetizaron nuevos péptidos dirigidos a la proteína TAU, y los valores de aplicación de los mismos se evaluaron con el ensayo CKK-8 y ELISA.

KEY WORDS: Alzheimer's disease peptide, hyperphosphorylated TAU protein, memantine hydrochloride

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