



## Anti-dementia effects of *Kukjiwhang-tang* on improvement of memory retention and suppression of ChAT and AchE activities in rat cerebrum

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The herbal extract YMJ has been widely used as an anti-aging herbal medicine for centuries in Asian countries. Among the various modified subscriptions of YMJ, *Kukjiwhang-tang* (KJT) was formulated to enhance memory retention.

This study examines whether KJT enhances cognitive ability in the dementia animal model and discusses its possible mechanisms. In this study, the effects of KJT on the rats induced dementia by injection of ibotenic acid in the medial septal cell were investigated via behavior and biochemical analysis. In the morris water maze test, administration of KJT significantly increases the ability of memory retention in the dementia rats. In addition, the amount of AchE in CA1 region diminished significantly. These results suggested that KJT treatment may help dementia patients or the elderly recover from cognition deficiencies or degeneration in clinic.

Key words: *Kukjiwhang-tang*, memory retention, ChAT, AchE