USE OF BENZOIC ACID SALT IN THE MANUFACTURE OFA COMPOSITION FOR PREVENTING OR TREATING DEMENTIA OR MILD COGNITIVE IMPAIRMENT

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

The present invention relates generally to a novelty treatment for dementia or mild cognitive impairment, and more specifically to a use of benzoic acid salt in the manufacture of a composition for preventing or treating dementia or mild cognitive impairment.

Description of Related Art

The prevalence of dementia in the elderly is increasing rapidly in the aging society, of which the deteriorating clinical course is a heavy burden to both the patients and their family. Early detection and intervention of Alzheimer's disease (referred to as "AD" hereinafter) is pivotal for the outcome (1). Mild cognitive impairment (referred to as "MCI" hereinafter), particularly amnestic MCI (referred to as "aMCI" hereinafter), is a risk factor and may be a prodromal stage of AD. The mainstream treatment for mild and moderate AD is acetylcholine esterase inhibitor (referred to as "AChEI" hereinafter). However, its efficacy and tolerability are unsatisfactory. Besides, AChEI does not show convincing efficacy for MCI (2-4), implying that other mechanism(s) may underlie the pathogenesis of MCI.

Although NMDAR activity is essential for cognitive function, its role in AD is still not fully understood. NMDAR over-activation by glutamate results in cell death. The excitotoxicity is one of the theories of AD, particularly in the late stage (54). Based on the hypothesis of NMDAR overactivation (7), NMDAR antagonists are developed for the treatment of AD. Memantine is an uncompetitive NMDAR partial antagonist of low affinity, which supposedly can block NMDAR overactivation by preventing excessive influx of calcium (8-10) and has been used for the treatment of moderate-severe AD. However, it has

CLAIMS (clean)

What is claimed is:

1. A use of benzoic acid salt in the manufacture of a composition for preventing or treating dementia or mild cognitive impairment, wherein an effective amount of the benzoic acid salt is 200 milligrams (mg)/day to 2000 mg/day.
2. The use according to claim 1, wherein the benzoic acid salt is sodium benzoate, potassium benzoate or calcium benzoate.
3. The use according to claim 1, wherein the benzoic acid salt is sodium benzoate.
4. The use according to claim 1, wherein the dementia is early-phase dementia.
5. The use according to claim 4, wherein the early-phase dementia comprises mild Alzheimer's disease.
6. The use according to claim 1, wherein the mild cognitive impairment comprises amnestic mild cognitive impairment.
7. The use according to claim 1, wherein an effective amount of the benzoic acid salt is 500 milligrams (mg)/day to 1000 mg/day.
8. The use according to claim 1, wherein an effective amount of the benzoic acid salt is 500 mg/day to 900 mg/day.
9. The use according to claim 1, wherein an effective amount of the benzoic acid salt is 750 mg/day.
10. The use according to claim 3, wherein an effective amount of the sodium benzoate is 500 mg/day to 1000 mg/day.
11. The use according to claim 3, wherein an effective amount of the sodium benzoate is 500 mg/day to 900 mg/day.
12. The use according to claim 3, wherein an effective amount of the sodium benzoate is 750 mg/day.