A MEDICAL FOOD SOUVENAI® FOR AD PATIENTS CAN BE USED SAFELY IN COMBINATION WITH AN ACETYLCHOLINESTERASE INHIBITOR IN AN AGED RAT MODEL

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Preclinical studies have demonstrated synergistic actions of specific nutrients, leading to increased formation of synaptic membrane, reduced Abeta production, and improved memory. Based on this, the multi-nutrient concept Fortasyn™Connect (FC) was designed for AD patients. The medical food Souvenaid® containing FC was tested in a randomized controlled trial and improved memory in drug-naive mild AD patients. The results suggest a role for Souvenaid® in the overall management of AD. Current standard practice for AD treatment, acetylcholinesterase inhibitors (AChEI) have been reported to induce common adverse events including digestive, cardiovascular, and urogenital effects. The present study was designed to see whether Souvenaid® may be used safely in concordance with AChEI, without increasing possible side effects. 24-months-old rats were fed FC diet or Control diet and were administered increasing doses of AChEI. Brain AChE activity was measured in addition to physiological parameters reported to be influenced by AChEI, like body temperature, heart rate, micturition and locomotion. AChEI administration confirmed earlier reported reductions of AChE-activity. In addition, AChEI dose-dependently reduced body temperature and locomotion, while increasing micturition. FC diet did not have negative effects on brain AChE activity or on any of the other physiological parameters. The absence of interaction between FC diet and AChEI on an extensive set of cholinergic parameters, provides a good starting point to evaluate potential benefits of Souvenaid® in AD patients receiving standard pharmacological treatment in a clinical setting. Currently, Souvenaid® is tested in an add-on study, S-Connect (NTR1683).

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