

Natureza do trabalho: Resumo

TÍTULO

PLANT EXTRACTS AND ISOLATED NATURAL COMPOUNDS FOR THE PREVENTION AND TREATMENT OF ALZHEIMER'S DISEASE

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RESUMO

Introduction: Alzheimer's disease (AD) is defined as a progressive neurodegenerative disease and it is characterized by astrogliosis, microgliosis, neurofibrillary tangles and deposition of amyloid beta, leading to cognitive deterioration with behavioral disturbances and declining activities. The currently available therapeutic medications mainly include anti-inflammatory drugs (NSAIDs), antioxidants, NMDA receptor antagonist, nootropic agent and cholinesterase inhibitors. However, these pharmacological interventions are questionable since treatment success cannot be predicted and benefits in clinic are very limited. In this context, therapies involving natural products provide alternative and complementary choices to treat patients with AD. **Objective:** This review aimed to investigate published studies in PubMed database that used natural drugs and compounds to treat AD (clinical studies - humans) in the last 10 years (2005-2015). **Results and Discussion:** Our search in PubMed database resulted in 26 published articles correlating AD with treatment using natural products. Studies tested the following plants: *Bacopa monnieri*, *Hippophae rhamnoides*, *Dioscorea bulbifera*, *Ginkgo biloba*, curcumin, *Panax ginseng*, *Crocus sativus*, apple juice, *Polygonum multiflorum*, saffron, *Melissa officinalis*, *Cistanche tubulosa* glycoside, *Nigella sativa* and chlorella. *Ginkgo biloba* is the most studied plant with 11 articles in clinical trials with 8 positive results and 3 negative results. It can be suggested that *Ginkgo* may help established AD patients with cognitive symptoms but cannot prevent the neurodegenerative progression of the disease. **Conclusion:** Some natural drugs provided good/positive responses to treat and/or prevent the progression of AD in studied subjects. According to the data collected we can conclude that natural products can be explored in an attempt to find novel compounds to treat and prevent the progression of AD, since studies have confirmed the beneficial effects of several natural drugs.

References:

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