Effects of Ginkgo biloba extract in improving episodic memory of patients with mild cognitive impairment: a randomized controlled trial

Zhao MX1, Dong ZH, Yu ZH, Xiao SY, Li YM.

Author information

1Department of Traditional Chinese Medicine, Huadong Hospital, Fudan University, Shanghai 200040, China.

Abstract

BACKGROUND:

Mild cognitive impairment is a transitional stage between normal aging and dementia. It is important in terms of recognizing memory loss in older people as well as identifying a group of individuals at high risk of developing dementia and who may benefit from preventive strategies. Ginkgo biloba extract has been shown to possess polyvalent properties, such as anti-oxidation, anti-apoptosis and anti-inflammation. Ginkgo biloba extract appears to have a neuroprotective effect against neurodegenerative diseases.

OBJECTIVE:

To observe the efficacy of Ginkgo biloba leaf tablet in improving episodic memory of mild cognitive impairment.

DESIGN, SETTING, PARTICIPANTS AND INTERVENTIONS:

This is a multicenter, randomized, controlled trial. The authors enrolled generally healthy, ambulatory or ambulatory-aided amnestic subjects with MCI, 60 to 85 years old, who expressed a memory complaint from Huadong Hospital, seven Community Health Centers in Shanghai, and Shanghai First Welfare Institution. A total of 120 MCI patients were randomly assigned to the Ginkgo biloba leaf tablet group (treatment group, 60 cases) and control group (60 cases). The patients in the treatment group took Ginkgo biloba leaf tablets 3 times a day, 19.2 mg each dose. The control group did not receive any intelligence-promoting or vasodilator reflex treatment except some health care.

MAIN OUTCOME MEASURES:

The patients were tested with nonsense picture recognition of the clinical memory scale and the logical memory test based on the Wechsler memory scale before and after treatment.

RESULTS:

After 6 months of treatment, the scores of the logical memory test and nonsense picture recognition were increased significantly in the treatment group (P<0.01, P<0.05), while the scores of the two tests from the control group had no statistically significant difference (P>0.05). After treatment, the positive rate of nonsense picture recognition was 55.17% in the treatment group, which was significantly higher than that of the control group at 32.73% (P<0.05). The efficacy rate of logical memory was 58.62% in the treatment group, also higher than 38.18% in the control group (P<0.05).

CONCLUSION:
Ginkgo biloba leaf tablet showed good efficacy in promoting episodic memory function in MCI patients.