Lemon balm: A promising herbal therapy for patients with borderline hyperlipidemia—A randomized double-blind placebo-controlled clinical trial

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A B S T R A C T

Objective: Melissa officinalis is a perennial herb from the Lamiaceae family which has shown to have modulating effects on serum lipid profile. The aim of the current study is to explore the effects of M. officinalis supplementation on serum biochemical parameters of patients with borderline hyperlipidemia.

Methods: 58 hyperlipidemic patients were allocated randomly to 2 groups: first group received capsules containing 1000 mg M. officinalis leaf powder (MO group), and the second group received placebo capsules (P group) 3 times per day for 2 months. Fasting blood glucose (FBG), HDL, LDL, Triglyceride, Creatinine and liver function enzymes including AST and ALT were evaluated before and after study.

Results: The mean of LDL in MO group significantly decreased compared with P group after the supplementation (P = 0.02). Although the level of Cholesterol, FBG, HDL, Triglyceride, Creatinine and ALT did not show significant difference between two groups after 2 months (P ≥ 0.05), the level of AST exhibited a significant difference between two groups (P = 0.009).

Conclusions: Our findings demonstrated that M. officinalis supplementation as a rich source of antioxidants and bioactive compounds can be effective in remission of LDL and AST levels in patients with borderline hyperlipidemia.

Keywords: Lemon balm, Melissa officinalis, Blood glucose, Hyperlipidemia, Lipid profile, Liver enzyme

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