

Efficacy of Tribulus Terrestris Extract on the Serum Glucose and Lipids of Women with Diabetes Mellitus

Nasrin Babadai Samani¹,
Azam Jokar¹,
Mahmood Soveid²,
Mojtaba Heydari³,
Seyed Hamdollah Mosavat³

¹Department of Midwifery, School of Nursing and Midwifery, Shiraz University of Medical Sciences, Shiraz, Iran;
²Endocrinology and Metabolism Research Center, Shiraz University of Medical Sciences, Shiraz, Iran;
³Research Center for Traditional Medicine and History of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran

Abstract

Background: Considering folkloric use of Tribulus terrestris (T. terrestris) in diabetes and proven anti-hyperglycemic and anti-hyperlipidemic effects of T. terrestris in animal studies, we aimed to evaluate the efficacy of the hydro alcoholic extract of T. terrestris on the serum glucose and lipid profile of women with diabetes mellitus.

Methods: Ninety-eight diabetic women were randomly allocated to receive the T. terrestris (1000 mg/day) or placebo for three months. The patients were evaluated in terms of the fasting blood glucose, 2-hour postprandial glucose, glycosylated hemoglobin and lipid profile.

Results: T. terrestris showed a significant blood glucose lowering effect in diabetic women compared to placebo ($P < 0.05$). Also, the total cholesterol and low-density lipoprotein of the T. terrestris group was significantly reduced compared with placebo, while no significant effect was observed in the triglyceride and high-density lipoprotein levels.

Conclusion: This study showed preliminary promising hypoglycemic effect of T. terrestris in diabetic women.

Keywords • Medicine • Traditional • Diabetes mellitus • Herbal medicine