

Possible alternative medicine for diabetes

Dinithi C Peiris University of Sri Jayewardenepura, Srilanka D aw leaves of Passiflora suberosa L. (Family:Passifloraceae) is used as a traditional remedy to manage diabetes. Yet, its ethnomedical Kusage is not scientifically proven. Hypoglycaemic effect of the aqueous leaf extract (ALE) of *P. suberosa* in mice was determined. ALE was prepared and mice (n=9/group), were treated with 25, 50, 100, 200 mg/kg ALE and Distilled Water (DW; control). Fasting and random blood glucose levels were determined at 1st, 3rd and 5th hours of post-treatment. Acute administration of 50 mg/kg of ALE significantly (p<0.01) reduced fasting blood glucose levels (BGL) at 1st, 3rd and 5th hours of post-treatment. Similarly, 100 mg/ kg of ALE significantly reduced fasting BGL at 3rd and 5th hours of post treatment. However, it did not change the random BGL in non-fasted mice. To evaluate the chronic effect of ALE, 18 mice (n=9) were treated orally either with DW or 50 mg/kg of ALE for 30 consecutive days and fasting BGL was measured on the final day of the treatment after 1, 3, and 5 hours. A significant reduction in fasting BGL was observed, at 1st, 3rd and 5th hours, respectively. The same dose showed a significant (p<0.01) improvement in sucrose tolerance test after 5 hours. However, ALE did not show a significant improvement in glucose tolerance test following an oral glucose challenge. The findings from this study suggest that the ALE of P. suberosa may be prescribed as alternative medicine to manage diabetes mellitus. **Biography**

Dinithi C Peiris obtained her PhD from University of Sheffield, UK and Postdoctoral studies from Queen's University, and University of British Columbia, Canada. She is a Senior Lectuer attached to Univesity of Sri Jayewardenepura, Sri Lanka. She has published more than 15 papers in reputed journals and 6 text books for university students. She has been serving as an Editorial Board Member of two international journals. Her main research area includes use of traditional medicine for treatment of cancer and diabetes.

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