

Blood glucose lowering effect of Traditional Medicine Formula No. 28 (TMF28) on type 2 Diabetes Mellitus patients

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Abstract

A community based phase 2 clinical trial before-after study was conducted according to objectives of determining hypoglycemic effect of TMF 28 (Thetyinnkalat Hsay) and its side effects on 30 newly diagnosed type 2 diabetes mellitus patients. According to inclusion criteria 30 patients were recruited and written informed consents were obtained. Pre-intervention baseline investigations including fasting blood sugar at day 0, blood for liver functions, serum creatinine and ECG were done. All patients took seven tablets (300 mg tablet) three times per day with meal after getting diet control and physical exercise advice. Fasting and 2 hour post-prandial blood glucose were taken on day 7, 14, 21 and 28 with observation of any adverse effects during medication period. After completion of 28 days medication, post-intervention investigations were done. Results were discussed with physician and then feedback were given to the patients. Patients were given suggestion like some should be continue with TMF28 medication, some were advised to switch western hypoglycemic medicines and some did not need any medication apart from diet control, physical exercise and regular blood glucose examination. Fasting blood glucose levels reduced significantly from day 0 to day 28 (p value 0.000). There was no side effect like severe hypoglycemia or severe hyperglycemic attack (ketoacidosis) was observed during study period. It was also observed that it had no changes in ECG and serum creatinine. There were significant changes in SGOT and SGPT liver enzymes between pre and post interventions but these changes were within normal limit.