A251

Effect of aqueous extract of root bark of Salacia reticulata var. b-diandra on glucose homeostasis of non insulin dependent diabetic (NIDDM) patients

Salacia reticulata var β-diandra of the family Celestraceae is an endemic woody climber grown in Sri Lanka. It has been used in indigenous system of medicine to treat diabetes from ancient times. Anti-hyperglycaemic effect of the aqueous extract and methanol fraction of S. *reticulata* plant has been established in experiments with both normal and alloxan diabetic rats.

Since toxicological studies excluded any sign of toxicity of the extract and the antihyperglycaemic potency was satisfactory in animal models, it was decided to undertake a clinical trial with with type II diabetes mellitus (insulin dependent diabetic-NIDDM) Patients.

Sixteen newly diagnosed NIDDM patients (age 45 6 years) with random blood glucose concentration> 10 mmol/L and not requiring immediate treatment with oral hypoglycaemic agents or insulin were selected for the study.

A standard oral glucose tolerance test was performed with patients(n=8) before (with distilled water 0 and after the seven days of treatment with the extract of S. reticulate (5g/kg twice a day). The procedure was repeated with patients(n=8) who received the same dosage fo extract 5 minutes before a load of sucrose (50g). Blood glucose concentration were estimated by the glucose oxidase method.

Significantly reduced fasting serum glucose levels 915.5% reduction, $p<0.01$) and improvement in oral glucose tolerance ($p<0.01$) were observed after seven days of treatment with *S. reticulata* extract in NIDDM patients. More pronounced anti-hyperglycaemic effect ($p<0.01$) was observed in patients who received the same dosage of the extract 5 minutes before a sucrose load.