

Potential of *Sida rhomboidea*.Roxb Leaf Extract in Controlling Hypertriglyceridemia in Experimental Models

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ABSTRACT

The present study was undertaken to evaluate the antihypertriglyceridemic activity of *Sida rhomboidea*. roxb leaf extract (FESR) (200 and 400 mg/kg bodyweight) in Triton WR 1339 and oral lipid emulsion induced hypertriglyceridemia in rats. Plasma cholesterol (TC), Triglyceride (TG), HDL and Triglyceride secretion rate (TGSR) were assessed in control and Triton WR 1339 rats. TG profile in lipid emulsion treated rats was evaluated at an interval of 0, 3, 6, 9 and 12 hour post emulsion and area under curve (AUC) was calculated. FESR (200 & 400 mg/kg) treatment to Triton WR 1339 treated rats recorded significant decrement in plasma TC ($p<0.05$), TG ($p<0.05$) while HDL ($p<0.05$) was increased at 6th hour and 24th hour post Triton injection. Lowered levels of TGSR were recorded in Triton + FESR treated groups at 6th hour. In the second experiment oral lipid emulsion induced hypertriglyceridemia was significantly suppressed by FESR (200 & 400 mg/kg), indicated by lowered AUC values compared to its control (Lipid emulsion only). Results clearly substantiate the antihypertriglyceridemic potential of *S. rhomboidea*. Roxb leaf extract mediated via decreased intestinal absorption and increased catabolism of TG. The present study is of merit in providing pharmacological evidence for use of SR leaf extract as a folklore medicine for controlling obesity amongst north-eastern population of Indian subcontinent.

KEYWORDS

Sida rhomboidea. Roxb . Hypertriglyceridemia . Hypercholesterolemia . Triton WR 1339

REFERENCES

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