

Antidiabetic and Antihyperlipaemic Effects of Aqueous Neem (Azadirachta Indica) Extract on Alloxan Diabetic Rabbits

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Abstract : Extracts of various plants material capable of decreasing blood sugar have been tested in experimental animal models and their effects confirmed. Neem or Margose (Azadirachta Indica) is an indigenous plant believed to have antiviral, antifungal, antidiabetic and many other properties. This paper deals with a comparative study of the effect of aqueous Neem leaves extract alone or in combination with glibenclamide on alloxan diabetic rabbits. Administration of crude aqueous Neem extract (CANE) alone (1.5 ml/kg/day), as well as the combination of CANE (1.5 ml/kg/day) with glibenclamide (0.25 mg/kg/day) significantly, decreased ($P < 0.05$) the concentrations of serum lipids, blood glucose and lipoprotein VLDL (very low-density lipoproteins) and LDL (low-density lipoproteins) but significantly increased ($P < 0.05$) the concentration of HDL (high-density lipoprotein). The change was observed significantly greater when the treatment was given in combination of CANE and glibenclamide than with CANE alone.

Keywords : neem, hypoglycemic, hypolipidemic, cholesterol

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