

Anti-hypertensive activity of *Garcinia indica* fruit rind extract in L-NAME induced hypertensive rats

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Hypertension is well defined risk factor for cardiovascular diseases and most important causative factor for stroke as well as coronary heart diseases. In the present study *Garcinia indica* (GI) hydroalcoholic fruit rind extract was evaluated for antihypertensive potential in N ω -nitro-L arginine methyl ester (L-NAME) induced hypertensive rats. GI fruits are widely used to treat many ailments in the traditional system of medicines. In the present study hypertension was induced by chronic administration of L-NAME at dose 40 mg/kg/day for 28 days. GI hydroalcoholic fruit rind extract in the dose 200 and 400 mg/kg and enalapril as standard at dose of 20 mg/kg were administered orally in L-NAME induced hypertensive rats in month long study. At the end of the study, following parameters were assessed to evaluate antihypertensive potential viz., blood pressure, urine volume, natriuresis, kaliuresis and ECG. The result obtained from present study indicates that GI hydroalcoholic fruit rind extract significantly decreased the blood pressure, potassium, sodium levels as well as improvement in the ECG. The observed antihypertensive activity of GI hydroalcoholic fruit rind extract could be attributed to the presence of phytoconstituents like polyphenols, tannins, glycosides and carbohydrates. Hence GI hydroalcoholic fruit rind extract could be adjuvant in the treatment of hypertensive patients. Further clinical studies were needed to evaluate its safety and efficacy in human being.

Biography

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