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Antiatherosclerotic, hypolipidemic activities of ethanolic extract of *Corchorus aestuans* L. leaves on atherosclerotic induced albino Wistar rats

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Atherosclerosis and hyperlipidemia, resulting from the abnormalities of lipid metabolism is one of the major risk factors for the development of cardiovascular disease. In this present study, ethanolic extract of *Corchorus aestuans* L. (EECA) leaves were evaluated for antiatherosclerotic and hypolipidemic activities against high fat diet induced atherosclerosis in male Wistar rats. The experimental animals were divided into five groups, each having six animals. Group one served as normal control, group two received atherogenic diet (AD) (10 g cholesterol, 5 g sodium cholate and 100 g hydrogenated vegetable oil in 1000 g standard laboratory chow), remaining three groups three, four and five received AD along with standard drug Atorvastatin (10 mg/kg b.w p.o) and EECA (100 and 200 mg/kg b.w p.o) respectively for 90 days. The serum levels of total cholesterol (TC), triglycerides (TG), high density lipoprotein (HDL), low density lipoprotein (LDL), very low density lipoprotein (VLDL) and atherogenic index (AI) were measured. EECA significantly decreased the levels of TC, TG, LDL, VLDL as well as atherogenic index and significantly increased the levels of HDL in dose-dependent manner. This study indicates that ethanolic extract of *Corchorus aestuans* L. possesses hypolipidemic and antiatherosclerotic effects and could be beneficial in the management of hyperlipidemia and atherosclerosis.

Biography

Manavalan R has completed his PhD from Birla Institute of Technology and Science (BITS Pilani) Rajasthan, India. He is the Professor and Research Director at RVS College of Pharmaceutical Sciences, India. He has published more than 150 research papers in reputed journals.

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