

ABSTRACT

Myocardial infarction is making an increasingly important contribution to mortality statistics of CVD. The present study was aimed to investigate the cardioprotective effect of Quercetin and Catechin in isoproterenol induced myocardial infarcted rats. Subcutaneous injection of isoproterenol (150 mg kg^{-1}) to rats at an interval of 24 h for 2 days showed a significant ($p < 0.001$) increase in cardiac marker enzymes (LDH, SGOT and SGPT) in serum, increase in MDA levels in both tissue and serum; significant decrease in antioxidant enzymes (SOD, GP_X and CAT). Pretreatment with Quercetin (30 and 60 mg kg^{-1} , o. p.) and Catechin (20 and 40 mg kg^{-1} , o. p.) to isoproterenol treated rats for a period of 42 days showed significant ($p < 0.001$) protective effect. Administrations of Quercetin and Catechin perse to normal rats have shown very less significant effect on above parameters. So the study revealed that the cardioprotective effect of Quercetin and Catechin in isoproterenol induced myocardial infarction may be due to an attenuation of antioxidant enzymes and inhibition of lipid peroxidation of membrane and decrease in the levels of cardiac markers, which was further confirmed by histopathological studies.

Key words:- Cardiovascular diseases, Isoproterenol, Quercetin, Catechin.