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Cardioprotective Effect of Rutin Considering Cardiac Enzyme Level in Induced Myocardial Infarction

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***SUMMARY*. The present study was designed to investigate effects of rutin on isoproterenol induced myocardial infarction (MI) by considering enzyme level in rats. Rats were treated with rutin contineously for 10 days (10 mg/kg/day, i.p.,); MI were induced by treating rats with isoproterenol for last 2 consecutive days (5.25 and 8 mg/kg, i.p). Protein kinase C (PKC), malonylaldehyde (MAL), Glutathione (GSH), superoxide dismutase (SOD) and survival rate were evaluated. Rutin enhanced survival rate evaluated at the end of experiment. Result shows significant decrease in level of PKC ($P < 0.001$) and MAL enzyme ($P < 0.01$) while elevation of GSH ($P < 0.001$) and SOD ($P < 0.001$) level in pretreated rutin + isoproterenol group and pretreated rutin group as compared to isoproterenol treated group indicates cardioprotective effect of rutin. The results indicate that Rutin significantly reduces myocardial infarction and emphasize the beneficial action in prevention of MI.**

KEY WORDS: Glutathione, Malonylaldehyde, Myocardial infarction, Protein kinase C, Rutin, superoxide dismutase.

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