Protective effect of chrysin in streptozotocin induced diabetic in rat.

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From International Conference on Biosciences- Trends in Molecular Medicine.
Post Graduate Department of Biochemistry, Dwaraka Doss Goverdhan Doss Vaishnav College, Arumbakkam, Chennai 600 106, India. 7-8 February 2012.
American J of Bio-pharm Biochem and Life Sci 2012 March, Vol. 1 (Suppl 1): A55.

ABSTRACT

Chrysin (5,7-dihydroxyflavone) is a flavonoid, found to be present in many plants and possesses potent anti-cancer, anti-inflammatory anti- bactericidal, anti-viral, anti-allergic, and antioxidant properties. The present study was designed to investigate the possible beneficial effects of chrysin in streptozotocin induced diabetic in rats. Wistar male alino rats were divided into four groups. Control rats (Group 1) received Dimethyl Sulphoxide as a vehicle, diabetic rats (Group 11) received Streptozotocin (STZ) 50mg/kgbwt, (Group 111) rats received Chrysin 20mg/kgbwt and (Group 1V) rats received STZ 50mg/kgbwt and Chrysin 20mg/kgbwt. We evaluated the beneficial effect of chrysin by measuring the levels of blood glucose, urea,glycosylated hemoglobin, plasma insulin, serum creatinine, lipid peroxidative products and antioxidant enzymes. Chrysin treatment markedly reduced the levels of blood glucose, glycosylated hemoglobin, urea, serum creatinine and increased plasma insulin. Study result indicated that the antioxidant enzyme activity of the kidney was increased, while thiobarbituric acid reactive substances (TBARS) were reduced in chrysin treated diabetic rats. In conclusion, the present result suggest that chrysin protects the kidney in sever diabetic and thus may provide promising antidiabetic drug for managing diabetic kidney disorder.

Published: 1 March 2012.