

Effect of Hydroalcoholic Extract of *Chlorophytum borivilianum* Tubers in Alleviating the Diabetic Impotency in Streptozotocin Induced Male Diabetic Rats

N.S Vyawahare, V.G Kagathara, A.D Kshirsagar, R Rajendran, M.N Patil, A. A Jagtap, S. S Sadar

Department of Pharmacology, AISSMS College of Pharmacy, Kennedy Road, Pune 411 001, India.

ABSTRACT

The prevalence of diabetes mellitus (DM) has continued to grow over the past decade, and it is an important cause of organic impotence. In the present study we investigated the effect of hydroalcoholic extract of tubers of *Chlorophytum borivilianum* (CB) in alleviating the diabetic impotency in rats. Male wistar albino rats were classified into two groups as normal control and diabetic group. Normal control group rats were injected with 0.1 M citrate phosphate buffer (0.1 ml, i.p) while in diabetic group, DM was induced by intraperitoneal injection of streptozotocin (STZ; 60 mg/kg) freshly dissolved in 0.1 M citrate phosphate buffer (pH 4.5). On confirming the diabetic state, the rats in diabetic group were individually tested for sexual potency by pairing them with pro-oestrus female rat. Diabetic rats showed a significant decline in the sexual potency as compared to the normal control groups. Following this, the diabetic rats were divided into four groups and treated orally as: diabetic control group with distilled water 2 ml/day, CB-100 group with CB 100 mg/kg/day, CB-300 group with CB 300 mg/kg/day and standard group with sildenafil citrate 4 mg/kg/day for 14 days. Their sexual behavior was evaluated on 15th day by pairing with a pro-estrous female rat and evaluated for CB, at 100 mg/kg, for sexual vigor and sexual arousal as compared to diabetic control rats. The study revealed dose dependent improvement in all the parameters of sexual behavior were enhanced against diabetic control group, reflecting increased potency.

KEYWORDS

Chlorophytum borivilianum . diabetes mellitus . Impotency . streptozotocin

REFERENCES