[Effect of qiangyi jiangtang capsules on diabetes mellitus model rats].

[Article in Chinese]

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Abstract

OBJECTIVE:

To study the pharmacodynamics of qiangyi jiangtang capsules (QJC) to offer the scientific foundation for clinical treatment to model rats of diabetes millitus induced by high lipid forage and streptozotocin.

METHODS:

The model rats of diabetes mellitus were induced by intraperitoneal injection of 0.6% streptozotocin (30 mg/kg body weight) given to Wistar rats after feeding with high lipid forage for a month and followed by fasting for 18 hours. Rats with level of blood glucose over 10.0 mmol/L 5 days after modelling was regarded as the successful model. Besides, a group of blank control was set up with rats fed with general forage and injected with equal volume of citric acid buffer solution. The successfully modelled rats were randomly divided into the model group, the positive control group and the high (2.0 g/kg), middle (1.2 g/kg) and low (0.4 g/kg) dose QJC treated groups. Meanwhile, the same volume of normal saline was given to rats in the blank control group and the model group, while Matfarmin (0.5 g/kg) was given to the rats in the positive control group. The levels of blood glucose (BG), serum fructose amine (SFA), hemoglobin A1c (HbA1c) were measured after one month of medication, and the amount of water drinking and food intake were measured at the second and the fourth week of the treatment.

RESULTS:

The levels of BG, SFA, HbA1c, the amount of water drinking and food intake in the 3 QJC treated groups were obviously lower than those in the model group ($P < 0.05$ or $P < 0.01$).

CONCLUSION:

QJC could remarkably lower the levels of BG, HbA1c, SFA and the amount of food intake and water-drinking of DM model rats, it is a Chinese herbal preparation worthy of further development and research.