



EFFECT OF HYPOGLYCEMIC PLANT COLLECTION EXTRACT ON SOME INDICATORS OF CARBOHYDRATE METABOLISM IN CONDITIONS OF EXPERIMENTAL DIABETES

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Relevance: Abu Ali Hussein ibn Abdallah ibn Sina (16 August 980 - 18 June 1037) created works not only on medicine but also on the history of theology, philosophy, astronomy and religion. A number of sources record more than 450 works by Ibn Sina, and only 242 Gypsies have reached us. Ibn Sina's Works list more than 100 herbal products in the treatment of diabetes mellitus. One of the most commonly used plants in diabetes is white mulberry (*Morus alba*) plant raw materials and large zulturum (*Plantago major*) leaves. Ibn Sina cited that raw materials of these tumors are high in effectiveness in diabetes mellitus not only when applied separately, but also in the form of folding.

Purpose: The extraction of sugar-lowering substances from medicinal plants consists in the creation of effective antidiabetic drugs based on them by revealing mechanisms of action on biochemical processes.

Methods and techniques: Experiments for this were carried out on laboratory white rats with a weight of 160-180 G bulgan. Rats were taken to the abdominal cavity with a body weight estimate of 17 mg/ 100 g of the physiological solution of alloxanglydrate, and alloxane diabetes was called. For the experiment, the first intact, the second alloxan was administered to diabetes called rat, and the third alloxan was administered orally to diabetic rats for 7 days with plant extracts of 50 mg / 100 g and oranil of 100 mg/kg. After 7 days of determining the level of glucose in the blood of rats, the activity of lactate, pyruvate levels in liver and muscle tissues as well as the enzyme hexokinase were analyzed in one vaccine itself. Maxalli's raw materials have been cited as having a high effect in diabetes mellitus not only when applied separately, but also in the form of folding.

Results: The hypoglycemic effect of the collection extract based on plant raw materials was found in rats with experimental diabetes. The direction of the metabolic effect of the assembly was assessed by quantitative shifts in the levels of metabolites of carbohydrate metabolism in intact and diabetic conditions. A decrease in blood glucose levels has been found to occur with a simultaneous increase in glycogen Reserve in the liver by stimulating hexokinase activity and providing energy from free metabolites. Taking the inclusions to be studied in rats with alloxan diabetes has helped increase glucose levels in skeletal muscle in vitro. Also from the results of the study led to the activation of the enzyme hexokinase in the liver without a significant recommendation for enzyme activity in the muscles of the collection. In the context of alloxan diabetes, a sharp decrease in enzyme activity in the liver is observed, despite the fact that the amount of glucose in the mine is much higher, indicating that it occurs as a result of a decrease in the synthesis of hexokinase. According to the results of the experiment carried out, on the basis of plant extract, diabetes was called and reduced blood sugar levels in rats by 40%.

Conclusion:

1. Alloxan significantly reduces blood sugar levels when hypoglycemic collection is administered orally to diabetic rats.
2. In liver tissue, the enzyme stimulates hexokinase activity, significantly reducing lactate levels in experimental diabetes.



3. demonstrated that it increases lactate levels in muscle tissue by having the property of reducing sugar levels by oranil.