A RETROSPECTIVE ANALYSIS OF THE EXPERIMENTAL AND CLINICAL STUDY OF PASENIN, A DRUG FOR THE TREATMENT OF DYSLIPIDEMIA IN PATIENTS WITH DIABETES MELLITUS

V.V. Karabayeva
Senior Researcher, Department of Experimental Pharmacology,
All-Russian Scientific Research Institute of Medicinal and Aromatic Plants (Moscow, Russia)
E-mail: vera-karabaeva@rambler.ru
L.V. Krepkova
Ph.D. (Biol.), Head of Toxicology Department,
All-Russian Scientific Research Institute of Medicinal and Aromatic Plants (Moscow, Russia)
E-mail: krepkowa2011@yandex.ru
I.A. Lupanova
Ph.D. (Biol.), Head of Preclinical Research Centre,
All-Russian Scientific Research Institute of Medicinal and Aromatic Plants (Moscow, Russia)
E-mail: lupanova@vilarnii.ru
A.N. Babenko
Ph.D. (Biol.), Leading Researcher, Department of Toxicology,
All-Russian Scientific Research Institute of Medicinal and Aromatic Plants (Moscow, Russia)
E-mail: babenko@vilarnii.ru
P.G. Mizina
D.Sc. (Pharm.), Professor, Deputy Director for Science,
All-Russian Scientific Research Institute of Medicinal and Aromatic Plants (Moscow, Russia)
E-mail: pg-mizina@vilarnii.ru

Relevance. The currently used hypolipidemic drugs to reduce the risk of cardiovascular complications in patients with diabetes mellitus are quite effective, but when prescribed for a long time can cause undesirable side effects. The use of herbal medicines for dyslipidaemia also has a positive experience with safe and effective use. One of the perspective plants showing hypolipidemic and hypoglycemic activity is Trigonella foenum-graecum from which seeds the medicine «Pasenin» was created.
Purpose. To carry out the retrospective analysis of experimental and clinical researches of pasenin as dyslipidemic medicine for diabetes mellitus.
Material and methods. Preclinical studies were carried out in rats using models of hyperlipidemia induced by administration of 10% fructose solution and by feeding an atherogenic diet as well as in the cholesterol atherosclerosis model in rabbits by Anichkov. Blood levels of glucose, total cholesterol (TC), low and high density lipoprotein cholesterol (LDL and HDL), triglycerides (TG) and phospholipids were determined to assess hyperlipidemia.
Clinical studies were conducted at the Department of Internal Medicine, Sechenov University, involving 106 patients with type I and type II diabetes mellitus. «Pasenin» was given to patients against the background of basic hypoglycemic therapy Patients in the control group received placebo according to a similar treatment. The research included an interview, anthropometric, objective and laboratory examination data, blood coagulation and fibrinolysis parameters. All patients underwent light capillaroscopy of the nail bed. The hypocoagulatory effect was calculated from the graph obtained with the help of an electrocoagulograph.
Results. Experimental and clinical studies have confirmed hypolipidemic and hypoglycemic action of passenin. Administration of pasenin in patients with diabetes mellitus led to a decrease in atherogenic fractions: TG, total lipids, LDL with moderate lipid metabolism abnormalities. The drug showed the greatest therapeutic effect in patients with diabetes mellitus type I and II in the compensation stage of the disease. Long-term (16 weeks) administration of «Pasenin» increased a blood clotting time, activated fibrinolysis and improved a microcirculatory blood flow.
Conclusions. «Pasenin» can be the drug of choice in therapy of dyslipidemia in patients with diabetes mellitus, including with signs of diabetic angiopathy.

Key words: *Pasenin, Trigonella foenum-graecum, dyslipidemia, hypolipidemic properties, diabetes mellitus, hypoglycemic properties*.

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