PHARMACOECONOMIC ANALYSIS OF INSULIN ANALOGUES

Bezdetko N. V., Saadoon Jabbar Abdulkareem
The National University of Pharmacy, Kharkiv, Ukraine

The basis of the treatment of diabetes mellitus (DM) - insulin drugs. Insulin therapy is indicated for all patients with diabetes mellitus type 1. They make up 15-25% of all patients with diabetes. Among the patients with type 2 DM insulin-yielding are 30-35% of cases. Proper insulin therapy allows for compensation of DM for a long time. This leads to the prevention of late vascular complications of DM. Researchers and pharmaceutical companies are constantly working to develop new and better insulin preparations. Aim of research - clinical and economic comparison of new modern insulin preparations. The study uses the analytical methods. Results and discussion. Current insulin formulations are divided into groups based on origin and duration of action. The effect of short-acting preparations starts after 30 minutes, reaching a maximum after 2-3 hours and lasts 6-8 hours. Simple insulins administered subcutaneously 30-45 minutes prior to meals. Furthermore, they can be administered intravenously and intramuscularly. The hypoglycemic effect of insulin average duration and a long-acting begins respectively 1.5-2 and 6-8 hours and lasts up to 18-22 and 24-26 hours. The most effective treatment for DM currently believe human insulin. In many countries almost completely abandoned the use of animal insulins. Using biotechnology to create an analogue of human insulin. They differ in chemical structure. This drugs are glargine, detemir, new analogues - tadzheo, deglyudek. The insulin analogs can achieve glycemic control in a large number of patients. They help avoid hypoglycemia during the day and at night. The disadvantage of insulin analogues - a very high cost. Price of new insulins limits their use and inclusion in the clinical protocols of DM treatment. Conclusions. To enable the new insulin analogues in clinical protocols of diabetes treatment it is necessary to do cost-effectiveness study.