CCS of the fetuses remained unchanged comparing with the intact group of rats. The weight of the placenta decreased by 19%. The tendency to increase the number of fetuses by 10% compared with the control group was reviled after the introduction of chophytol. The decreasing of PIFD index in 5 times, a significant increase in the weight of the fetuses and placenta (by 21% and 12%), and reliable increase in the size of the fetuses by 9% compared to the group of control animals were observed.

Conclusions. Thus, chophytol advantaged the improvement of embryo and fetogenesis, accompanied by a marked tendency to decrease the PIFD index and normalization of other parameters. Even some parameters of the drug exceeded the markers of the development of the fetuses of the intact control group. The obtained results point at the expediency of further investigation of the mechanisms of chophytol gravidoprotective action.

NEW APPROACHES TO CORRECTION OF RESISTANT EPILEPSY USING DRUGS FROM DIFFERENT PHARMACOLOGICAL GROUPS

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Introduction. Despite successes in the treatment of epilepsy almost 25% of patients can not achieve medical remission. Pharmacoresistance is the ineffectiveness of therapy in the application of at least two treatment schemes of various combinations of antiepileptic drugs in marginal daily doses, which can cause expressive side effects. One of the ways to overcome the resistant epilepsy is the use of drugs from other pharmacological groups, also called non-antiepileptic drugs.

Aim. Determination of drugs from various pharmacological groups that can be used in the adjuvant therapy of resistant epilepsy.

Materials and methods. Cochrane, Pubmed, ScienceDirect and Google Scholar resources were searched up to February 2019. The search terms were "resistant epilepsy", "non-antiepileptic drugs", "controversial drugs", "targets".

Results and discussion. It has been found that many non-antiepileptic drugs from different pharmacological groups show significant benefit in resistant epilepsy.

Almost all antiarrhythmic drugs – sodium channel blockers (lidocaine, propafenone), calcium channel blockers (nifedipine, amlodipine, cinnarizine, diltiazem, verapamil), β-blockers (propranolol, metoprolol, pindolol), amiodarone have shown anticonvulsant properties not only on various animal models, but also in double-blind, placebo-controlled trials (for example, nifedipine, lidocaine). This confirms the assumption that epilepsy and cardiac arrhythmia may have common molecular background. Anticonvulsant effect (apparently related to influence on neuronal Na^+/K^+-ATPase activity) is also verified for cardiac glycoside digoxin. Ivabradine, a hyperpolarization-activated cyclic nucleotide-gated channel blocker, and allopurinol, an inhibitor of xanthine oxidase, also possess anticonvulsant activity. Statins (atorvastatin, simvastatin and pravastatin) demonstrate promising anticonvulsant and beneficial effects in numerous seizure models. Both selective (rofecoxib, celecoxib, etoricoxib, nimesulide) and non-selective (indomethacin, acetylsalicylic acid) COX-2 inhibitors have shown a variety of beneficial responses in a various animal model of seizures. Anticonvulsant effect of acetaminophen also has been carried out. These examples can be an illustration of use medicines off label.

Conclusions. The experimental and clinical data reveal the new ways of adjuvant treatment of resistant epilepsy using various non-antiepileptic drugs from different pharmacological groups.