

instability, disability and disorder of memory, tachycardia, pale skin, meteosensitivity; at tensiometry there is a steady decrease in blood pressure (below 105/65 mm Hg for men and 100/65 mm Hg for women aged 25-50 years). PAHS is accompanied by a high risk of coronary heart disease, ischemic stroke, promotes the development of dementia and it is a predictor of mortality in the elderly.

**Aim.** Formulate the prevailing processes in the development of PAHS.

**Materials and methods.** The overwhelming cause (80% of all cases) of PAHS is neurocirculatory dystonia. The main pathogenetic links of this syndrome are discoordination of the anterior (providing mainly parasympathetic effects) and posterior (mostly sympathetic effects) of the hypothalamic particles, dysfunction of its parasympathetic nuclei, and other structures of the parasympathetic system.

**Results and discussion.** As a result of these changes, an imbalance of vasoconstrictive and vasodilating influences (its prevail) of the nervous system on the walls of the vessels develops, vascular resistance of peripheral vessels decreases, volume of the arterial and venous vessels increases, venous blood flow to the heart decreases, minute volume of the heart decreases also. As a result, the broken blood supply to the organs (including the brain and the heart, which leads to the deepening of the process), redistribution of blood flow, hypoxia (primarily circulatory type).

**Conclusions.** Correction of PAHS includes physical therapy (used breathing exercises), physiotherapy, medication methods, diet therapy, psychotherapy. Medicinal correction (pathogenetic therapy) PAHS has the purpose of influence at a certain aims: 1) Hypothalamus (cerebroprotectors, nootropics, adaptogenes, tranquilizers); 2) Peripheral divisions of the parasympathetic system and target organs (vessels of a resistive type, heart) – a diet with increased salt content, vasoconstrictors, glucocorticoids, cardiotonics.

## **THE INFLUENCE OF THE EXTRACT OF THE CABBAGE GARDEN ON THE PROLIFERATIVE INFLAMMATION PHASE**

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**Introduction.** In officinal medicine, the register of anti-ulcer drugs from plants, the effectiveness of which is confirmed by experimental and clinical studies, is very limited. Information of traditional medicine on the gastroprotective activity of plant sources gives experimenters ample opportunities to create new medicines that have not yet been used in the practice of treating patients with gastric ulcer and duodenal ulcer. Historically, the approaches to the treatment of gastric ulcer with herbal preparations for the prevention and increase of the interrecurrent period in folk and traditional medicine have found a new stimulus due to the original technologies of obtaining new products from plant raw materials. The undoubted advantage of herbal remedies is a wide range of their biological effects, low toxicity, softness of action, interchangeability of plants. Means of plant origin can be used in the initial stages of peptic ulcer, in the period of exacerbation – as additional treatment in combination with potent substances, and at the stage of anti-relapse therapy they provide for the rejection of xenobiotic stress. It is difficult to overestimate the importance of drugs from plants in periods of remission or stabilization of the pathological process, when they act as supportive, carrying out the prevention of exacerbations. Taking into account the effectiveness, tolerability and cost-effectiveness of phytotherapeutic drugs for the treatment of gastric ulcer and duodenal ulcer are not competing, but supplementing modern pharmacotherapy means.

**Aim.** The study of the antiproliferative activity of the extract of the cabbage garden.

**Materials and methods.** Chronic granulomatous inflammation (aseptic subchronic) was modeled by implanting a sterile cotton ball under the skin of an animal's back ("cotton granuloma"). The experiment was conducted on 24 non-linear white rats of both sexes weighing 200-220 g. Wool was cut off in anesthetized rats in the back area. Under aseptic conditions, an incision of the skin and

subcutaneous tissue about 1 cm long was made with scissors, after which a cavity was formed with tweezers in the subcutaneous tissue through the incision, into which a sterile 40 mg cotton ball was placed. Two sutures were put on the wound. On the 13th day after the start of the experiment, the implanted ball with the granulation tissue formed around it was removed, weighed, then dried to constant weight at 60-65°C. The processes of exudation were judged by the difference between mass of the original (freshly isolated) and dried granulomas; about proliferation – on the difference between mass of dried granuloma and initial mass implanted cotton ball. The extract of the cabbage garden was administered in doses of 25 and 50 mg / kg, the reference drug, indomethacin, in a dose of 5 mg / kg intragastrically daily for 12 days, starting from the day of tampon implantation.

**Results and discussion.** Studying the effect of extract of the cabbage garden on the development of inflammation showed that, against the background of pronounced proliferative processes, the extract of the cabbage promoted a significant reduction ( $p < 0.01$ ) of granulomatous infiltration in both studied doses. However, a more significant antiproliferative effect was observed with a dose of 50 mg/kg. The extract of the cabbage inhibited the formation of granulomas in doses of 25 and 50 mg/kg: the mass of dry granulation fibrous tissue significantly decreased by 23% and 29%, respectively, compared with untreated control. It should be noted that cabbage extract was somewhat inferior in its effectiveness to the comparator drug – indomethacin.

**Conclusions.** The cabbage extract in the garden shows a pronounced antiproliferative effect in the experiment.

## EXPERIMENTAL SCREENING STUDY OF ANTICONVULSANT ACTIVITY OF NEW 2,4-THIAZOLIDINEDIONE DERIVATIVES ON MAXIMAL ELECTROSHOCK SEIZURE TEST

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**Introduction.** Epilepsy is a neurological disorder affecting a large scale of the population, accounting for about 1% of the world's burden of diseases. Epilepsy is a neurological disorder characterized by excessive electrical discharge in the brain, which causes seizures. The current therapeutic treatment of epilepsy with modern antiepileptic drugs (AEDs) is associated with side-effects, dose-related and chronic toxicity, and teratogenic effects, and approximately 30% of the patients continue to have seizures with current AEDs therapy. As most antiepileptic drugs are consumed all the time, the concomitant administration of other drugs provokes the risk of drug interactions. The development of new AEDs with greater clinical efficacy and less amount of side effects, devoid of possibility drug control interactions and better pharmacokinetic properties is still current issue of modern pharmacology.

**Aim.** The aim of this work is to study the anticonvulsant activity of new 2,4-thiazolidinedione derivatives on the maximal electroshock seizure test (MES).

**Materials and methods.** 73 white mice have been used for screening. The animals were kept in accordance with international and national bioethics recommendations. Fifteen 2,4-thiazolidinedione derivatives have been studied of which 3 substances-leaders have been selected. The MES is a model for generalized tonic-clonic seizures and provides a hint of a compound's ability to stop seizure spread when all the neuronal bonds in the brain are maximally active. The studied substances have been administered intragastrically at a dose of 100 mg/kg. Carbamazepine has been used as a reference drug (Finlepsin, TEVA, Israel) and administered intragastrically at a dose of 40 mg/kg. Seizures have been induced after 30 minutes later the administration of drugs using coronal electrodes, over-threshold stimulation with a 50 Hz alternating current of 50 mA intensity. Tonic and clonic seizures have been caused by application for 0.2 s corneal electrodes. Protective anticonvulsant activity has been determined by the following indicators: latent period, number of clonic / tonic seizures per mouse, % of animals in a group with clonic and tonic attacks, the severity of the seizures (1 grade- single shaking, 2 grades – maneuvering run, 3