injected intraperitoneally with a 15% solution of ethyl alcohol at a dose of 2.25 g/kg. The object of the study were the CA_1 hippocampal region and piriform zone of paleocortex, studied in 1 and 10 hours after exposure. Brain was fixed and stained using standard techniques.

Results and Discussion. We identified that intraperitoneal administration of alcohol leads to typical nonspecific changes in archicortex and paleocortex, which are accompanied by the end of 1 hour by an increase in the number of normochromic nerve cells with chromatolysis, which indicates an evolving neuronodystrophy. The increase in pycnomorphic neurocytes and shade cells confirms the presence of necrobiotic processes and decreased functional activity of the hippocampus. In the pyriform zone there are also signs of neuronal dystrophy, however, according to the hypochromic type. Against the background of increased hypo- and hyperchromic forms of cellular destruction in CA_1 by the 10^{th} hour of alcohol intoxication, compensatory-adaptive changes have been observed, flowing on the type of hypochromic reparative regeneration, expressed in an increase in the volume of hypochromic neurons containing two nucleoli.

Conclusions. The morphological equivalent of compensatory-adaptive changes in paleocortex is the presence of hyperchromic neurons without signs of dystrophy with an increase of body and nucleus in the volume. Such changes indicate the processes of regenerative hypertrophy, characterized by intracellular hyperplasia of organelles of neuroplasma and nucleus.

PREVENTION OF COMPLICATIONS OF HEMORRHOID SCLEROTHERAPY WITH ULTRASOUND

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Key words: *hemorrhoid, sclerotherapy with ultrasound influence, miniinvasive technologies*

Background. We have a lot of miniinvasive technologies for hemorrhoid's treatment, that's why an evaluation of their effectiveness is needed, especially when we are choosing the outpatient technology. Because one of the most important aspects of using miniinvasive technologies in outpatient is safety. We have the largest experience of using the method of hemorrhoid's sclerotherapy with ultrasound influence — the Russian scientist's invention, used in medical practice since 2005.

Aim. To evaluate the effectiveness of hemorrhoid's sclerotherapy with ultrasound influence and to develop measures to prevent complications.

Material and Methods. We evaluated the results of treatment of 4640 patients on the basis of our center — «Clinic» Movement «, Volgograd, between 2005 and 2015. The maximum follow-up period was 8 years. The procedure was carried out by ultrasound device «Prokson», which allows the introduction of a sclerosant solution with simultaneous ultrasound influence. Sclerosing treatment with ultrasound influence was performed in patients with stages I–III, and at stage IV with bleeding and anemia, as preparation for surgical intervention.

Results and Discussion. In the long-term period in patients with I–III st. stable remission was observed in 61.5%, the number of complications did not exceed 2.95%. The method is effective for stopping bleeding in anemia and IV st. hemorrhoids, as preparation for the second stage of treatment.

Conclusions. Evaluation of many years of experience in the use of hemorrhoid's sclerotherapy with ultrasound influence has shown high efficiency and safety. However, at III stage of the disease must be repeated after 2–6 months.

MRI IN THE OBJECTIVE ASSESSMENT OF NEW NON-INVASIVE METHOD OF TREATMENT OF COMPLEX ANAL FISTULAS

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Key words: *pararectal fistula, sclerotherapy with ultrasound influence, ultrasound cavitations*

Background. Anal fistulas are one of the most widespread colon diseases, their frequency is from 15 to 30%, their treatment is very difficult and actual problem. Now there are a lot of non-invasive methods of treatment of this pathology, therefore an algorithm of objective assessment of results is needed.

Aim. To study possibilities of MRI in theobjective assessment of new non-invasive method of treatment of complex anal fistulas.

Material and Methods. We selected the patient with extra-sphincter recurrent anal fistula, which was treated by the new non-invasive method — sclerotherapy with ultrasound influence. We used MRI for the objective assessment of results of healing.

Results and Discussion. The reason of anal fistula's recurrence was identified due to MRI. We found retro-rectal cavity and used the new method of sclerotherapy with ultrasound influence. MRI was performed again after 1 month and the positive dynamic was registered. The sclerotherapy