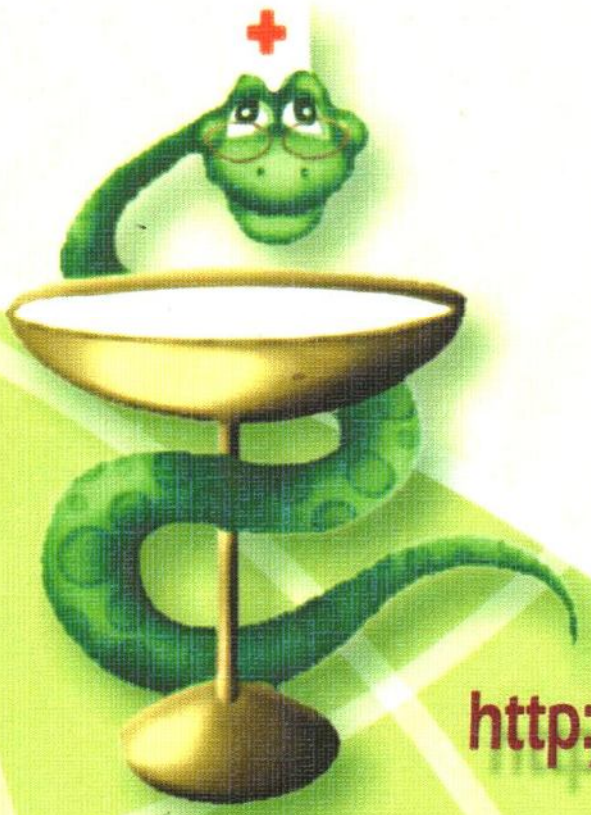
ABSTRACT BOOK

5th International Scientific Interdisciplinary Conference

for medical students and young doctors



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Kharkiv National Medical University, Kharkiv, Ukraine

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CONTENTS

Kalchuk R.

NEUROHORMONAL AND METABOLIC PARAMETERS OF ORAL MUCOSA INFLAMMATION IN IMMOBILIZED RATS

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Aim: to investigate the state of oral mucosa in inflammation, immobilizationa stress and their combination in experiment on rats.

Materials and methods. The research was performed on 24 male Wistar rats aged e months with 169,0±3,24 g of mean body weight. Immobilization was conducted ox-cage during 15 days 5 hours daily. Inflammation was provoked by 5-minutes ping of gums with 4 % caustic sodium solution under thiopental narcosis. rohormonal parameters — thymus, adrenals and spleen weight coefficients in % ted to body mass, level of ascorbic acid in adrenal glands by spectrophotometry, nophils in blood by leucocytes formula state of oral and gastric mucosa in points, meters of lipids peroxidation and anti-oxidation defense by levels of malonic dehyde, diene conjugates, superoxide dismutase and catalase activity in blood by ctrophotometry were estimated. Reliability was approved by statistical analysis at $p<0,05$.

Results. It was stated that in inflammation of oral mucosa disturbances of rohormonal processes typical for emotional stress, decrease of thymus weight fficient ($p=0,03$), increase of adrenals and spleen weight coefficients ($p=0,04$ and ,01), elevation of ascorbic acid ($p=0,04$) and cortisol ($p=0,04$), eosinopeny 0,04) and trophic disorders of stomach appear in rats. These changes are ompanied by oxidation balance shifts — increase of malonic dialdehyde, diene jugates in blood serum and decrease of superoxide dismutase and catalase activity 0,05). Comparation of data from rats with modeled inflammation, stress and their mbination represents predominance of changes in last case. Close correlation link ween neurohormonal changes and lipid peroxidation-antioxidant defense ameters was stated ($r>0,75$).

Conclusion. Revealed data about neurohormonal and oxidation-metabolic ameters of oral mucosa inflammation and stress testify their pathogenetic mmunity and opens the perspective of further research — experimental stantiation of clinical use of anti-stress medications of neurometabolic action.

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INSULIN AND GLUCAGON EXPRESSION IN RAT'S PANCREAS DURING ALLOXANDIABETES

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Introduction. Hyperglycemia during diabetes mellitus type I is developing ause of lack of insulin level in blood, which is produced by B-cells in islets of gerhance. Whereas nowdays it is unknown how A-cells, which produce the gonist of insulin- glucagon, react on the hyperglycemia.

Aim. That's why the aim of our study was to study the dynamic of insulin and agon expression in islets of Langerhance in rats pancreas during the alloxan diabetes.

Material and methods. The work was made on 45 rats, which were injected aperitoneally with alloxan, in doze of 180 mg/kg. Blood glucose levels were asuring 1, 2, 3, 5, 7 days after injection. The organs were taken 1, 2, 3, 5, and 7 s after the injection. Material was fixed in 10% neutral formalin and embedded in affin by standard methods. Histological sections of the pancreas were studied