

arose during hospitalization in the intensive care unit of the Regional Clinical Cardiology Center, Chernivtsi. Data analysis of 84 cards of patients hospitalized in cardiac intensive care. The parameters studied included age, pulmonary edema (PE), normal or impaired carbohydrate metabolism (type 2 diabetes mellitus), and newly diagnosed diabetes mellitus (NDDM), impaired glucose tolerance (IGT) The diagnosis of impaired carbohydrate metabolism (CM) was made on the basis of the WHO recommendation.

From 184 patients, 38 (21%) indicated a history of type 2 diabetes mellitus. Of 38 patients with an indication of diabetes mellitus, 23 (63%) had decompensation of carbohydrate metabolism (glycemia exceeded 11.1 mmol / l). Upon admission to a hospital with ACS hyperglycemia was detected in 46 patients. For the first time, an impaired CM was detected in 29 (15.9%) of 184 patients, of which NDDM was in 4 (15.3%), IGT - in 4 (30.7%). The total number of patients with impaired carbohydrate metabolism was 68 (36.9%). Normal carbohydrate metabolism was observed in 115 patients (63.1%). At the time of admission to reanimation department, out of 184 ACS patients, PE was registered in 14 (8.39%) patients, of which 5 patients (men (M) -3, age - 68.5 ± 2.5 ; women (F) -2, age - 78.1 ± 2.5) with DM2 , 3 patients (M-1, age - 87.0 ± 2.5 ; F-2, age - 74.8 ± 2.5) with the NDDM; ; 1 patient (M-1 age - 74.0 ± 2.5 ;) with ITG and 5 patients (M-3, age- 65.6 ± 2.5 ; F-2, age - 70.6 ± 2.5) with normal CM. Based on the data of the S register of Regional Cardiological Centre, Chernivtsi, patients hospitalized in BCC with ACS pulmonary edema occurs in 8.39% of cases. When analyzing groups of patients with normal or impaired carbohydrate metabolism is very significant but due to the small sample, difference, $t = 1.5$, $p < 0.07$. In the group of patients with ACS with NDDM, pulmonary edema occurs in 21.7% of cases, with an obvious type of diabetes mellitus - 16.5%, NTG - 15.6%, norma M - 3.5% of cases. The highest percentage of PE development occurs in patients with a violation of the CM without performed on prehospital stage of antihyperglycemic therapy, namely in patients with NDDM - 21.7%. This can explain the high percentage of PE in patients with IGT -15.6%,when only diet is recommended. Patients with type 2 diabetes have long-term experience diseases and the presence of diabetic complications compared with NDDM, and their glycemic level in 63.5% of cases exceeded 11.1 ml mol / l compared to patients with IGT. Moreover, PE occurred in patients with overt type 2 diabetes in 16.5% of cases.

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DIAGNOSTIC SIGNIFICANCE OF INFRARED THERMOMETRY IN PREVENTING THE DEVELOPMENT OF PURULENT-NECROTIC COMPLICATIONS OF DIABETIC FOOT SYNDROME

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Measurement of body temperature in various diseases is one of the most common diagnostic measures, due to its low cost, speed and ease of execution, as well as non-invasiveness for patients. Pathogenetically, a decrease in local temperature can be associated with microcirculation disorders, metabolic and degenerative changes in tissues. Inflammation processes accompanied by vasodilation and acceleration of metabolic processes, malignant neoplasms, endocrine and neuroregulatory disorders contribute to the increase in skin temperature. Changes in temperature precede other clinical symptoms of the disease, which allows for early diagnosis and timely treatment. In diabetes mellitus, changes in local temperature have not been sufficiently studied, although a number of studies indicate the diagnostic value of the relationship between total and local temperature in the plantar area of the diabetic foot in limb ulcers.

The aim of our study was to establish the significance of changes in local body temperature in the early diagnosis of purulent-necrotic complications of diabetic foot syndrome in patients with type 2 diabetes.

We examined 87 patients with type 2 diabetes who were treated for diabetic foot syndrome. Patients were divided into two groups: the first group - 47 patients with surgical pathology with diabetes without purulent-necrotic complications and 40 patients with purulent-necrotic

complications. Infrared thermometry was performed in all patients after 15 minutes of acclimatization to room temperature ($23 \pm 1.0^{\circ}\text{C}$), in standard clothing, at rest. Absolute local indicators were translated into relative by dividing by the indicator of the total body temperature and compared with each other in the dynamics of treatment. The temperature difference in different areas was calculated - $^{\circ}$.

When comparing the temperature gradients of the lower extremities, there was a significant increase in the gradient in patients of the second group, with the maximum increase in the temperature difference on the plantar surface of the foot ($p < 0.05$). In patients of the first group, the temperature difference in the lower extremities was greater than between the upper extremities, but not so significant ($p > 0.05$). The skin temperature of the plantar surface of the foot was probably lower in the second group of patients with diabetes mellitus ($30.9 \pm 0.49^{\circ}\text{C}$) compared to the first group ($33.0 \pm 0.46^{\circ}\text{C}$) ($p < 0.05$). Significant changes in limb skin temperature were often correlated with the presence of diabetic retinopathy ($r = 0.36$, $p < 0.05$) and the severity of diabetic nephropathy ($r = 0.76$, $p < 0.05$). To a lesser extent, the temperature gradient correlated with a healthy lifestyle ($r = -0.54$, $p < 0.05$), adherence to dietary norms ($r = -0.56$, $p < 0.05$), sufficient physical activity ($r = -0.59$, $p < 0.05$). The occurrence of angiopathies of the extremities led to a decrease in the intensity of blood flow, a decrease in metabolic activity of tissues and, accordingly, to a lower temperature of the distal parts of the legs. The body responded by raising blood pressure.

Thus, infrared thermometry is an affordable and sensitive method for early diagnosis of circulatory disorders of the lower extremities and detection of the risk of severe diabetic foot. The criterion for such a risk can be considered a temperature gradient of more than 10%. According to the results of infrared thermometry, it was found that the skin temperature of the plantar surface of the foot in patients with purulent - necrotic complications was significantly lower ($30.9 \pm 0.49^{\circ}\text{C}$) compared with patients with diabetic foot syndrome, which currently did not require surgical treatment ($33.0 \pm 0.46^{\circ}\text{C}$).

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THE INFLUENCE OF THE RATE OF ACETYLTATION ON THE STATE OF THE BEHAVIORAL RESPONSES OF RATS IN CONDITIONS OF LEAD INTOXICATION

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There is speculation that the marker predisposition to action of the unfavorable factors of the environment, including the salts of heavy metals, is the type of acetylation. However, the role of individual genetic predisposition as the reasons for the sensitivity of the organism to the effects of toxic chemicals, including heavy metals, today was studied not enough.

Objective: to study the changes of behavioral reactions in rats with different types of acetylation in the conditions of acute intoxication of lead acetate.

Experimental studies were conducted on white conventional outbred sexually mature male rats, which were divided into two groups: with «quick» and «slow» type of acetylation by the test with amidopyrin. Subacute intoxication was modeled by means of intraperitoneal injection of lead acetate to experimental animals at doses of 2,5 mg/kg (1/100 DL50) and 15,5 mg/kg (1/16 DL50) for 28 days. Isotonic solution of sodium chloride (intraperitoneally) was injected to control groups of animals instead of lead acetate. In the dynamics of intoxication were studied behavioral reactions in rats: horizontal and vertical motor activity, mink reflex, emotional reactivity and integrated behavioral activity.

It is established that the introduction of rats lead acetate in the dose of 2,5 mg/kg (1/100 DL 50) accompanied by inhibition of indicators of behavioral reactions with 14 days of the experiment, the «slow» and «quick» acetylation to achieve maximum to the end of the experiment. Increasing the dose of the toxicant to 1/16 DL 50 causes early behavioral changes: with 7 days of the experiment, the «fast» acetylation. More expressive changes in indicators of behavioral reactions of the toxicity of lead acetate in doses 1/100 DL 50 and 1/16 DL 50 to the end of the experiment observed in the «quick» acetylation.