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**INFLUENCE OF METHYLURACIL OINTMENT ON THE NITRIC OXIDE METABOLITES IN RATS THERMAL BURNS FOCUS**

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Objective - the study of nitric oxide metabolites in the focus of a thermal burn influenced by the methyluracyl ointment.

Materials and мethods. Experiments modeling were performed on rats burns population WAG, divided into 3 groups: 1 - intact; 2 - animals with thermal injury without treatment (control); 3 - animals with thermal injury, which was applied be the methyluracyl ointment. For the animals of the 2nd and 3rd groups on the shaved portion of the rear part of the hip a thermal burn was induced with anesthesia. Methyluracyl ointment was applied on the burned surface of the 3rd group of animals. Monitoring processes of the burn wound healing was performed on 3rd, 7th, 14th, 21st, 28th days. In these terms, the state of the wound was recorded and the content of nitric oxide metabolites in the focus of rats was investigated.

The results of the research. For the second group animals after thermal exposure a marked hyperemia with the consequent thin brown scab formation on the 2nd day was noticed. From the 3rd day, there was a tendention of the thick scab softening in the central part, after the pressure from under it stood serous- purulent exudate. On the 7th day, the wound was as a deep zone of the necrosis filled with serous - purulent exudate. Over the next two weeks of observation (up to 21 days) in the center of the burn wound exhibited reduced areas of necrosis and epithelialization of the wound defect start was noticed. By the 28 days of burn wound was partially epitelizated to form a thin tender scar.

In the control group the content of nitric oxide metabolites in the focus was increased during the observation period in comparation with the intact animals. So on the third day the content of nitric oxide metabolites exceeded the normal by 2 times, on the 7th day - 2.9 times - reaching maximum values on the 14th day - 1.9 times, on the 21th day - 1.7 times, on the 28th day - in 1,4 times.

3rd group animals was influenced by the methyluracyl ointment for wound healing and it was more favorable than for the control group. Right after the burn injury surface was hyperemic and by the 2nd day was covered with a thin brown scab. Starting from the 3rd day there was a softening of the central part of the large scab, but when pressed it stood out serous exudates mainly. On the 7th day, the zone of the wound necrosis was filled with a serous exudate. Over the next two weeks of observation (up to 21 days) in the center of the burn wound area reduction of necrosis and epithelialization of the wound defect occurred much faster than in the previous group. By 28th day of burn wound was almost completely epitelizated to form a gentle scar.

In the skin influenced by the ointment the nitric oxide concentration was increased only during the first week of the observation (day 3 - 2.2 times, the 7th day - 2.1 times). The parameters normalization occurred on the 14th day, staying within physiological norma until the observation finish. At the same time during the 7 - 28th days nitric oxide concentration was significantly lower than for the control group ( on the 7th day - 1.4 times, on 14th - 1.8 times on 21th - 1.7 times and on the 28th day - 1.6 times ).

Conclusion. As follows from the results of the research, the trial burn is accompanied by a lengthy and significant increainge of the nitric oxide metabolites concentration in the focus (not less than 28- days). The Methyluracyl ointment application leads to a rapid (on the 14th day) nitrogen oxide to the physiological normal reducing that is more favorable for the wound healing process.