

ciprofloxacin (32,4%), carbapenems (45,7%), rifampicin (44,8%), fusidic acid (32,4%), gentamicin (22,9%). From the cephalosporin group *S. aureus* was sensible to ceftriaxone in 28,6% of cases and to cefazolin in 24,8% of cases, and to the representatives of the third generation – to cefoperazone (9,2%) and ceftazidime (10,5%). Antipseudomonal activity was manifested in carbapenems (53,8%) and monofluorchinolones (ofloxacin - 43,6% and ciprofloxacin - 41,0%). From the aminoglycoside group the activator was more sensible to amikacin (20,5%), than to gentamicin (15,4%). Only ceftazidime from the cephalosporin series was active in regard to *Ps.aeruginosa* in 25,6% of cases. The bacteriostatic effect to *S. aureus* and *Ps.aeruginosa* occurred on the part of semisynthetic tetracyclines in doxycycline (13,3% and 25,6% accordingly). The increase of enterobacteria was suppressed in the majority of cases by: ceftriaxone (41%), ceftazidime (35,9%), imipenem (46,2%), gentamicin (43,6%), ciprofloxacin (41,0%), piperacillin (28,2%), chloramphenicol (20,5 %).

Conclusion: Antibacterial therapy of burn disease infectious complications is determined by the spectrum of probable activators. Monofluorchinolones and carbapenems turned out to be the most effective antimicrobial agents as the result of the research.

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THE CYTOKINE PROFILE IN THE ACUTE CRYOTRAUMA

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Nowadays cold trauma is considered to be one of the most important causes resulting in high rate of disability or death among patients. The most frequent manifestation of cold trauma is frostbite occurring both in high and low latitudes. One may sustain cryotrauma even at warm weather.

The main aims this study are to estimate the adaptive mechanisms of the organism in developing cold trauma and investigate interleukin1 β (IL-1 β) and the factor of tumour necrosis α (TNF α) under the influence of potent irritant.

Materials and methods: the experiments were carried out on the male mature Vistar rats with the body weight 200-240gr. The models of frostbite induced by chlorethyl were employed within one week after damage. The withdrawal of rats was implicated by means of decapitation under etheric anesthesia in an hour, 24 hours, on fifth and seventh days. The approval of Ethics Board of the Northern state medical university was obtained. «The Regulations of the work

with experimental animals » were observed according to the Enactment of Ministry of Health of the USSR №755 issued 12.08.1977.

The contents of the anti-inflammatory cytokine IL-1 β and TNF α was determined in blood serum with the help of immunofermental method using reagents manufactured by "RD Systems", USA. Experimental group was affected by cold. Control group consisted of intact animals. Statistical analysis was done on the basis of Statagraphics plus 5.1 for Windows.

Results: the study demonstrated that the production of cytokine was dramatically decreased in the early reactive period (in one hour and 24 hours after damage) and sharply increased at the beginning of the late reactive period (at $p \leq 0,001$). The imbalance of anti-inflammatory cytokine was observed at all experimental stages the secretion of TNF α prevailed. We suggested that in intact animals revealed cytokine performed a certain "sentry" function since it was this cytokine that was the mediator of « the first wave » responsible for triggering defensive immune mechanisms.

Conclusions: the secretion of cytokine IL-1 β and TNF α in a healthy organism reflects the current condition of immune system. Imbalance of cytokine at frostbite specifies indicates their role in pathogenesis of acute cryotrauma and may be of a certain value in diagnostics of the severity of injury in the monitoring cryotrauma and in developing new methods of treatment, which may prove to be more effective, than traditional ones.

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INVESTIGATION OF MEDICINAL TEAS APPLIED IN HYPOFERRIC ANEMIA PHYTOTHERAPY

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Drug therapy of hypoferris anemia is based on the introduction of iron from iron containing medicinal agents into the body. The substitution therapy of iron deficiency by means of its salt preparations is effective enough, however, a serious adverse events development risk, even while using modern synthetic medicinal agents, remains rather high. At the same time, phytotherapy as one of the treatment modes is deprived of disadvantages natural for drug treatment with using xenobiotic medications of synthetic origin. Phytotherapy is recommended as a means of complementary therapy and especially effective for iron deficiency prevention at hidden iron deficiency.