

S5-1.3

Use of Physical Methods as an Element of Complex Treatment of Burn Wound Microbiome

V. Nagaichuk^{1,2}, R. Chornopyshchuk¹, O. Yunusova³, and M. Onyshchenko¹ ¹National Pirogov Memorial Medical University, Vinnytsya, Ukraine

²Regional Clinical Hospital named after M.I. Pirogov, Vinnytsya, Ukraine ³Regional Laboratory Center of the MOH, Vinnytsya, Ukraine

According to World Health Organization, burns remain a high priority matter of medicine as the third in the overall structure of traumatism. One of the main causes of death from burn injuries is infectious complications, which require the use of effective antimicrobial agents. In view of the increased resistance of microorganisms to antibiotics, it is expedient to find alternative ways of antimicrobial control, one of which is the use of low-intensity current without external power supplies. This is exactly the purpose of our study. The obtained results allowed to confirm the antimicrobial effect of low-intensity currents without external supplies on the example of a clinical strain of methicillin-resistant *Staphylococcus aureus* in a closed and open electrical circuits with the need for further research in this direction.