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ANTIVIRAL EFFECT OF THE COMBINATION -YEAST ENZYME COMPLEX AND RIMANTADIN

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Antiviral effect of the combination - yeast enzyme complex including robonuclease,phosphodiestherase and phosphomonoestherase and rimantadin on the reproduction of 3 Influenza A viruses in cell cultures MK/Monkey Kidney/, chick embryons and in experimental infection in mices have been studied. The results are presenting on the basis of discovery and decreasing of infectious and chemagglutining activities of the treated viruses by simultaneously application of combination in infected cell cultures. The antiviral effect of the combination is better /Δ 3 lg $TCID_{50}$/ compare with the action of the individual drugs/yeast enzyme complex and rimantadin/

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Inhibition of Influenza A and B Viruses Reproduction by Di- and Tripeptides Similar to N-Termini of HA2 Viral Polypeptides.

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Di- and tripeptides resembled the conservative regions of N-termini of HA2 subunit of influenza A and B viruses were synthesized: carbobenzoxy-glycyl-leucine (Z-Gly-Leu) and carbobenzoxy-glycyl-leucyl-D-phenylalanine (Z-Gly-Leu-D-Phe) are similar to the influenza A HA2 N-terminus, and carbobenzoxy-glycyl-phenylalanyl-D-phenylalanine (Z-Gly-Phe-D-Phe) - influenza B HA2 N-terminus. The antiviral activities of these oligopeptides were evaluated against various strains of influenza A and B viruses (laboratory and epidemic ones and influenza A strains resistant to rimantadine) in MDCK cells by ELISA. The IC_{50} (inhibitory concentration causing 50% reduction in optical density for monolayers inoculated with 100-200 tissue culture infectious doses of virus) of Z-GLy-Leu ranged from 350 to 800 mkM against different influenza A strains, but Z-Gly-Leu-D-Phe was more active. The IC_{50} of Z-Gly-Phe and Z-Gly-Phe-D-Phe ranged from 250 to 550 and 90 to 275 mkM correspondingly against different influenza B strains. The concentrations of oligopeptides with antiviral activities were not toxic for the cell culture. Inhibitory activity of oligopeptides is amino acid sequence specific and depends on the sequence length. Further studies on the site and mechanism of action of these oligopeptides are carried out.