

Session: P094 Novel and improved therapeutical approaches to viral infections

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**Clinical efficiency of oligoribonucleotide-D-mannitol complexes**

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**Background:** Influenza (flu) and other acute respiratory infections (ARI) are the most common human diseases. Current epidemic process is characterized by simultaneous circulation of different types of flu viruses. Treatment of patients with flu and other ARI is very difficult. Medications cover almost all possible response to infectious process and often do not show the desired results. Natural Oligoribonucleotides-D-Mannitol Complexes (ORNs-D-mannitol) have a wide range of biological activities and can be used in antiviral treatment since they play a key role in antiviral activity and can change a conformation of some proteins. This study was performed to determine the clinical efficiency of ORNs-D-mannitol in patients with ARI of various etiologies.

**Material/methods:** 108 patients were divided into two groups: the first (main group) consisted of 54 individuals, who took ORNs-D-mannitol complex therapy, the second (control group) – 54 patients, who received standard treatment (Arbidol as etiotropic drug). These groups were selected accidentally. ORNs-D-mannitol were administered at the concentration 500 mg 4 times a day to ingest after meals for 5-7 days. The treatment effectiveness was determined by clinical data and results of PCR.

**Results:** The complex treatment with ORNs-D-mannitol of patients had a positive effect on the course of the disease, that is accelerated patients' recovery. So, it lasted in average (1.8±0.2) days in the main group and (2.6±0.2) days in the control one. This drug contributed to significant decrease in duration of febrile period and cough. Comprehensive treatment with antiviral drug ORNs-D-mannitol improved the disease clinical findings significantly. Treatment with ORNs-D-mannitol caused the

eradication of flu, parainfluenza and adenoviruses in patients that were evidenced by PCR in dynamics. Pathogens were found in 7,5% of patients from the main group and in 57.9% of patients of the control one (Fig. 1).

**Conclusions:** Our research demonstrates that by eradication of flu, parainfluenza, adenoviruses and contributing to significant decrease in duration of febrile period and cough in patients, ORNs-D-mannitol have clinical efficiency.

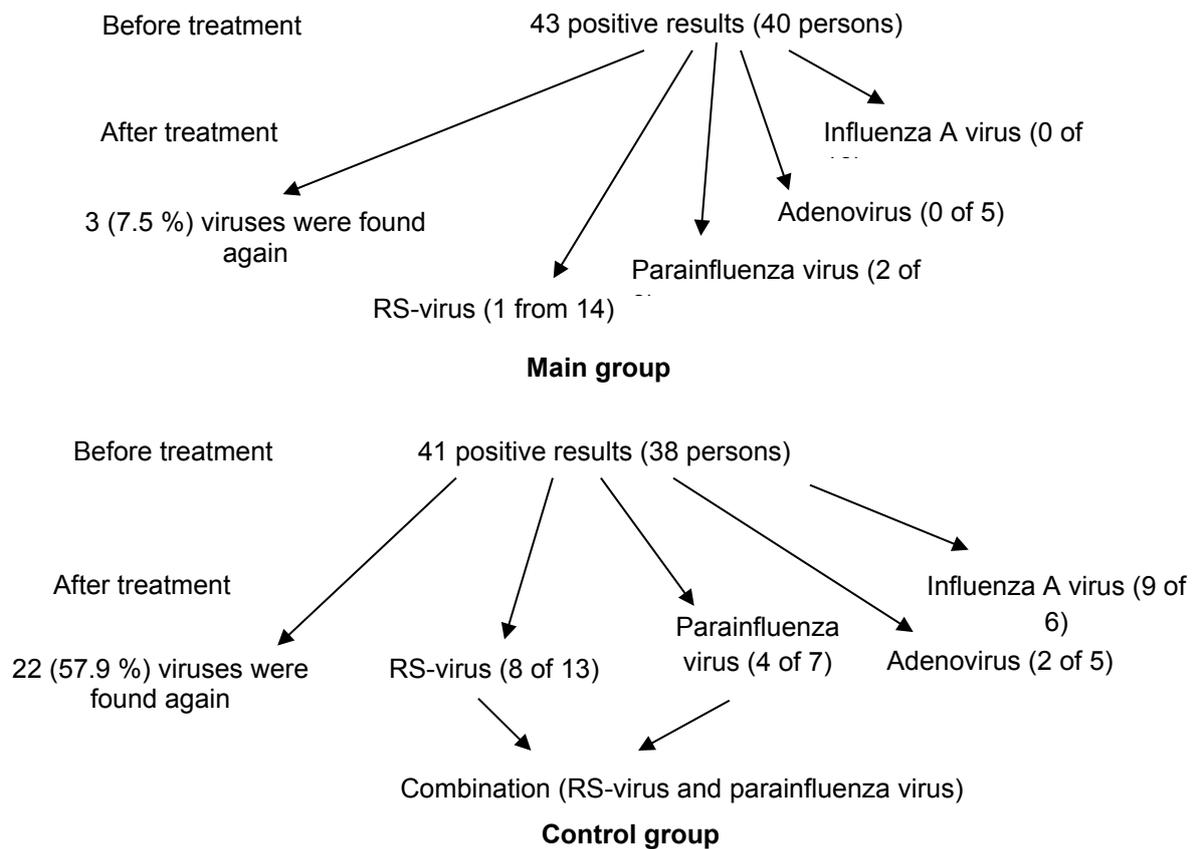


Fig.1. Virus frequency in patients with ARI before and after treatment according to PCR