Title: Role of viral pathogens in infectious exacerbations of bronchial asthma in adults

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Body: Purpose - to investigate the spectrum and frequency of viral pathogens in patients with infectious exacerbation of bronchial asthma (BA) which treated in a pulmonology department. The study included patients only if they voluntarily consent to the research, objectives and scope of planned inspections. This work was funded from the state budget. Virology were performed in all patients fence biomaterial: a smear or swab from the nasal cavity. Laboratory diagnosis of viral infection was performed by real-time PCR (PCR-FRT) and a rapid chromatographic immunoassay analysis. PCR was performed in adenoviruses (HAdV), bokavirus (hBoV), rhinovirus (HRV), coronaviruses (hCoV), RS-virus (HRcV), metapneumovirus (hMpV). The method of immunochromatographic test detected antigens of influenza viruses A and B, respiratory adenovirus (hAdV) and RS-virus (hRcV). For the purpose of the study was carried out screening all patients which were sent to hospital State Institution "National Institute of tuberculosis and pulmonology behalf F.G. Yanovsky, AMS of Ukraine" with the diagnosis of exacerbation of bronchial asthma from Dec 2010 to Sep 2011 a total of 52 patients observed, which revealed 21 viral pathogens by PCR, 6 viral pathogens by the rapid immunochromatographic test and 2 (hRcV) by both methods. Viral pathogens detected in the (48,1 ± 6,9)% of patients with exacerbation of asthma. The greatest etiological importance by the results of virological studies were: rhinoviruses – 68,0 %, influenza virus A and B – 12,0 %, RS-virus – 8,0 %, metapneumovirus – 8,0 %, adenovirus – 4,0 %, respiratory corona virus - 4,0 % of cases.