

# EPSTEIN-BARR VIRUS REACTIVATION AS ONE CAUSE OF OVERDIAGNOSIS OF BRONCHIAL ASTHMA

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**Abstract.** *The purpose of this study* was to analyze the literature data and to demonstrate in a clinical example how Epstein-Barr virus reactivation in patient with a protracted inflammatory process in the upper airways and bronchitis with obstructive syndrome caused overdiagnosis of bronchial asthma (BA). Epstein-Barr virus (EBV) is the most potent transforming type 4 human  $\gamma$ -herpesvirus, which plays a significant role in the formation of secondary immunodeficiency states and in the prevalence of diseases that are induced or associated with EBV infection, malignancies, autoimmune diseases, idiopathic pulmonary fibrosis, in the formation of allergic pathologies. According to the literature, it was determined that the imbalance in the functioning of antiviral and regulatory cytokines in EBV infection can potentiate the mechanisms of any pathology development. Due to the fact that studies on the EBV infection are not mandatory, reactivation of this infection is often not diagnosed. This clinical case demonstrates how Epstein-Barr virus reactivation in patient with a protracted inflammatory process in the upper airways and bronchitis with obstructive syndrome caused overdiagnosis of BA. **Conclusion:** Enzyme-linked immunosorbent assay (ELISA) and polymerase chain reaction (PCR) — the methods that complement each other, are

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most informative in identifying the primary and recurrent form of EBV infection. These methods should be used to detect the activity of EBV infection in patients with prolonged inflammatory processes in the upper airways and bronchitis with obstructive syndrome, as well as in patients with exacerbations of chronic obstructive lung disease that do not respond to standard therapy.

**Key words:** bronchial asthma, Epstein-Barr virus, diagnosis.

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