

MANAGEMENT OF BRONCHO-OBSTRUCTIVE SYNDROME: BETA-AGONISTS

Yu. I. Feschenko, M. M. Ostrovskyy, O. I. Varunkiv

Abstract

Broncho-obstructive syndrome (BOS) is a pathological condition with airflow limitation during breathing. Approximately 100 heterogeneous diseases are associated with BOS. In asthma and chronic obstructive pulmonary disease it is a leading clinical syndrome. Airway obstruction consists of reversible and irreversible components, with the inflammation as the main pathogenetic factor, developing under the influence of infectious, allergic, physical or neurogenic triggers. Moreover, the presence of viral or other respiratory infection deteriorates the course of bronchial obstruction, leading to the progression of the disease.

Current literature data regarding the mechanisms of BOS, its diagnosing and management, based on the use of different β_2 -agonists, are presented in this report. Dyspnea is certainly the main clinical manifestation of BOS, however, spirometry remains only one possible method to reveal its presence and severity. Confirmed bronchial obstruction requires immediate treatment with bronchodilators with a rapid onset of action and high safety profile. Formoterol in tandem with Cyclohaler inhaler ("Adamed", Poland), being a complete β_2 -agonist with lipophilic and hydrophilic properties, not only provides a high level of pulmonary deposition and has a dose-dependent effect with high intrinsic activity, but can also reduce activity of neutrophilic inflammation in the airways.

Key words: broncho-obstructive syndrome, treatment, β_2 -agonists, formoterol.

Ukr. Pulmonol. J. 2019;3: 32–36.

Yurii I. Feshchenko

*Director of National Institute of phthysiology and pulmonology named after
F. G. Yanovskii National Academy of medical sciences of Ukraine*

Academician of NAMS of Ukraine, professor

03038, Kyiv, 10, M. Amosova str.

Tel.: 380 44 275 0402, fax: 380 44 275 2118, admin@ifp.kiev.ua
