

EFFECT OF MAINTANCE TREATMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE ON SEPARATE PATHOGENETIC LINKS OF NEOCOLLAGENESIS AND LOCAL IMMUNE DEFENCE OF A BRONCHIAL TREE

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Abstract

Aim: to investigate the dynamics of cytokines and collagen type-IV levels in bronchoalveolar contents during the treatment of severe COPD using roflumilast.

Objective: The study involved 61 patients with stage III COPD. It was performed a fibrobronchoscopy with biopsy of bronchial mucosa by Clements (1967) in Ramires modificatoin (1980). The levels of collagen-IV were tested in bronchoalveolar fluid by ELISA with "StatFax 303 Plus" using reagents «Human collagen alpha- 4 (IV) chain (COL4A4)». Detection of IL-4, IL-6, IFN- γ and TNF- α were performed in bronchial content by ELISA with "StatFax 303 Plus" using reagents VECTOR-BEST ("Vector-Best", Novosibirsk). The study was performed prior to and in the course of treatment with conventional regimens (according to the standards prescribed by the order of Ministry of Health of Ukraine № 128 from 19. 03. 2007) and using roflumilast 500 mcg, 1 time per day.

Results. Roflumilast in severe COPD provided significant reduction of collagen-IV, IL-6, TNF α levels and stabilization of IL-4, IFN- γ levels in broncho-alveolar fluid, which depended on the duration of roflumilast use.

Keywords: chronic obstructive pulmonary disease, roflumilast, collagen-IV, IFN- γ , IL-4, IL-6, TN- α .

Ukr. Pulmonol. J. 2014; 2:73-77.

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