

## USEFULNESS OF PROTOCOL OF TREATMENT AND DISCHARGE FROM HOSPITAL OF THE PATIENTS HOSPITALIZED DUE TO EXACERBATION OF SEVERE AND VERY SEVERE CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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**Objective:** To assess the usefulness of a treatment plan and clinical stability criteria in making a decision on discharging the patients with exacerbation of severe and very severe COPD. **Material:** The study included 34 patients (26 males, 8 females), aged between 58 and 80 years ( $71.8 \pm 6.5$ ) hospitalized due to exacerbation of severe (23 out of 34 patients, i.e. 67.6%) and very severe (11 out of 34 patients, i.e. 32.4%) COPD. On admission, the mean FEV<sub>1</sub> before the administration of a bronchodilator was  $0.78 \pm 0.22$  L ( $31.7 \pm 8.2\%$  of the reference value), FVC  $2.52 \pm 0.87$  L ( $77.9 \pm 19.8\%$  of the reference value), and FEV<sub>1</sub>/FVC  $33.17 \pm 10.84\%$ . On admission, 10 out of 34 patients (29.4%) were diagnosed with chronic respiratory failure. **Methods:** In all patients an accepted plan of treatment was uniform: 1) nebulization with ipratropium bromide 250  $\mu$ g every 6 hours, 2) hydrocortisone hemisuccinate 100 mg every 12 hours, 3) methylxanthines at the doses previously used in the patient, 4) nebulization with salbutamol (short-acting  $\beta_2$ -adrenergic receptor agonist) 2.5 mg on request, and with the consent of a physician, 5) optimal oxygen therapy and also 6) antibiotics and cardiovascular drugs according to the medical indications. The clinical stability criteria have been established taking into account the following parameters: respiratory rate, heart rate, body temperature, the stability of blood gases during the day, no night-time awakenings due to dyspnoea, the need for beta<sub>2</sub>-agonists on demand, a determined upper limit of leukocytosis, regression of the cause of COPD exacerbation, patient's ability to move, take food and medicines independently. Meeting the clinical stability criteria within a 24-hour-observation was the basis for the reduction of a systemic corticosteroid dose by a half, and discharge on the next day with a strictly defined plan of outpatient treatment. **Results:** Mean duration of hospitalization was  $6.4 \pm 4.8$  days. It was reported that within 4 weeks after discharge one patient required readmission, however it was not associated with the failure of the outpatient treatment of COPD exacerbation. The patient, after an initial improvement, developed COPD exacerbation as a result of the contact with a patient with pneumonia. In the study group 2 out of 34 patients died – the first patient died during hospitalization, the second one after discharge, however, the reasons for his death were not connected with COPD exacerbation. **Conclusions:** The proposed protocol of hospital and outpatient treatment, a reduction of drug dosages and the criteria for discharge of the patients hospitalized due to the exacerbation of severe and very severe COPD enable to optimize the duration of hospitalization and do not entail the risk of readmission within a month due to unsatisfactory control of COPD exacerbation.