## STANDARDS FOR TREATMENT OF PATIENTS WITH COPD IN 2024: PLACE FOR TIOTROPIUM BROMIDE

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Abstract

Updated GOLD 2024 guidelines emphasized the problem of insufficient or inaccurate diagnosis of COPD, leading to inappropriate therapy of these patients. This trend is also widespread in Ukraine, despite the significant improvement in diagnosis and available treatment options.

The aim of the study was to determine the effectiveness of tiotropium bromide (Spiriva® HandiHaler® "Boehringer Ingelheim Pharma GmbH", Germany) for the initial and follow-up treatment of patients. We evaluated the effect of the drug on the clinical and functional status of patients and adherence to therapy.

Materials and methods. We enrolled 20 patients with newly diagnosed COPD (group 1) and 10 patients already receiving treatment with previously diagnosed COPD (group 2). In all group 2 patients the diagnosis was established in 2022-2023. In this study the diagnosis and initiation of treatment has been done according to GOLD 2024 recommendations.

In 1 month of treatment the effectiveness of treatment based on the change of symptoms (mMRC dyspnea scale and CAT score) and treatment compliance were assessed.

*Results.* Standard clinical examination was performed to confirm or revise of COPD diagnosis. In group 1 GOLD 2 airflow limitation were observed in 75 % (n = 15) of patients, GOLD 3 — in 25 % (n = 5); 25 % (n = 5) patients were classified as group A, and 75 % (n = 15) of patients — as group B.

In group 2 there were prevalent the patients with more severe airflow limitation:  $GOLD\ 2 - 40\ \%$  (n = 4),  $GOLD\ 3 - 60\ \%$  (n = 6). All patients from this group were allocated to group B due to symptoms intensity.

The analysis of CAT responses structure has demonstrated that the questions 1 to 4 evaluating such symptoms as cough and dyspnea collected more points.

All patients received inhalation therapy with tiotropium bromide DPI once daily and Berodual H MDI as needed.

In group 1 post-treatment CAT score demonstrated a significant change in comparison with visit 1 score (13,5 (SD 1,4) vs 11 (SD 1,0), p=0.001).

Conclusion. Overall, during the study period we observed a significant improvement in compliance, which was reflected in the decrease in the frequency of use of short-acting bronchodilators. The use of tiotropium bromide as an initial or follow-up therapy right after 1 month of treatment significantly reduced the clinical manifestations of the disease.

**Key words:** chronic obstructive pulmonary disease, GOLD 2024, tiotropium bromide.

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