

# EFFECT OF COMBINATION OF TIOTROPIUM/OLODATEROL ON PULMONARY FUNCTION IN PATIENTS WITH COPD IN THE REAL CLINICAL PRACTICE

**Y. M. Mostovoy, K. D. Dmytriiev, N. S. Slepchenko**

## *Abstract*

**Aim** — to evaluate the effect of combination therapy with tiotropium/olodaterol on pulmonary function in real clinical practice.

**Materials and methods.** 100 patients with the diagnosis of COPD were included into the study (mean age was  $64,09 \pm 1,94$  years, 66 men and 34 women). Smokers — 68 %, mean smoking duration ( $24,44 \pm 4,84$ ) pack-years. Average COPD duration was  $9,35 \pm 2,42$  years. All patients underwent spirometry at screening, 4-6 weeks and at 1 year after inclusion. FEV<sub>1</sub>, FVC, FEV<sub>1</sub>/FVC, FEF<sub>25</sub>, FEF<sub>50</sub>, FEF<sub>75</sub>, PEF, MMEF<sub>75/85</sub>, FEF<sub>75/85</sub> were calculated.

**Results.** There was statistically significant improvement in FEV<sub>1</sub> and FVC values between visits 1 and 3 ( $p < 0,05$ ). At visit 3 there was a statistically significant difference in FEV<sub>1</sub> and FVC values when compared with same values at visit 1 after the inhalation of salbutamol, demonstrating better bronchodilation effect of tiotropium/olodaterol. Absolute increase of FEV<sub>1</sub> between visits 1 and 3 was  $221,31 \pm 34,9$  ml; FVC —  $411,01 \pm 66,08$  ml. There was statistically significant increase of FEF<sub>75</sub>, MMEF<sub>75/25</sub>, FEF<sub>75/85</sub> between visits 1 and 3 ( $p < 0,05$ ). There was statistically significant increase of FEF<sub>75</sub> at visits 2 and 3 in comparison with postBD FEF<sub>75</sub> at visit, confirming better bronchodilation effect of tiotropium/olodaterol combination of at the level of small bronchi when compared with salbutamol ( $p < 0,05$ ).

**Conclusions.** Tiotropium/olodaterol combination showed good effect on pulmonary function in patients with COPD in real clinical settings. This combination demonstrated better bronchodilation than salbutamol, especially at the level of small bronchi.

**Key words:** COPD, tiotropium/olodaterol, spirometry.

**Ukr. Pulmonol. J. 2020;29(3):28–30.**

Yurii M. Mostovoy

National Pyrogov memorial medical university MOH of Ukraine

Chief of internal diseases propaedeutics chair

MD, PhD, Dr. Med. Sc., Professor

96, Khmelnytske highway, Vinnytsya, 21029, Ukraine.

Tel. +38-067-252-23-28., yura.mostovoy@gmail.com