PP23. ACUTE TOXICITY AND ANALGESIC ACTIVITY OF 4-(4-((4-(METHOXYCARBONYL)PHENOXY)METHYL) -1H-1,2 ,3-TRIAZOL-1-YL)BENZOIC ACID

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1,2,3-Triazoles have long been known to chemists, but in recent decades these compounds have become widely used in heterocyclic chemistry, since interesting biological activities have been discovered for them. In particular, they have been shownto have antimicrobial, antiviral, and antitumor activity. It has been shown that 1,2,3- triazole derivatives have an anti-inflammatory effect and are promising for further development as non-steroidal anti-inflammatory drugs. Thus, the presence of a 1,2,3- triazole fragment in a molecule can lead to the creation of potentially new compounds with high biological activity.

The aim of this work is to study the analgesic activity and acute toxicity of a new derivative of the 1,4-disubstituted 1H-1,2,3 series - triazoles - 4-(4-((4- (methoxycarbonyl)phenoxy)methyl) -1H-1,2 ,3-triazol-1-yl)benzoic acid.

Acute toxicity investigation using Litchfield and Wilcoxon method shown the mean semi-lethal dose (LD50) for mice 21,600 (18,782 ± 24,840) mg/kg. This substance belongs to the VI class of toxicity (relatively harmless substances). Under thermal pain stimulation (hot plate test) in intact animals (control), the latent period of the pain reaction was 12.5 sec. The reference drug ketoprofen at a dose of 10 mg/kg lengthens the latent period of the pain reaction by 2 times compared to the initial one. 4-(4-((4- (methoxycarbonyl)phenoxy)methyl)-1H-1,2,3-triazol-1-yl)benzoic acid increases thelatent period by 1.6 times compared to the original, somewhat inferior to the reference drug. In acetic writhing test, ketoprofen at a dose of 5 mg/kg reduces the number of writhings by 4 times, 4-(4-((4-(methoxycarbonyl)phenoxy)methyl)-1H-1,2,3-triazole-1- yl) benzoic acid at a dose of 150 mg/kg - 3 times compared to the control group.

Those, the 1,2,3-triazoles are prospective for further search for substances with analgesic action.