PERSPECTIVES OF SEARCH OF BIOLOGICALLY ACTIVE COMPOUNDS AMONG THE DERIVATIVES OF 6-HYDROXY-4-OXO-1,2-DIHYDRO-4*H*-PYRROLO[3,2,1-*ij*]QUINOLINE-5-CARBOXYLIC ACID ARYLALKYLAMIDES

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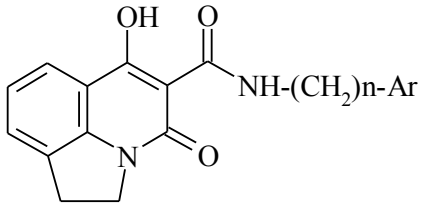
Introduction. The problem of creation of new anti-inflammatory drugs does not lose its relevance during several decades.

Aim. Taking this into consideration, we have developed a preparative method of synthesis and anti-inflammatory activity was studied of arylalkylamides series of 6-hydroxy-4-oxo-1,2-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline-5-carboxylic acid.

Materials and Methods. So we thought it is appropriate to carry out arylization reactions of ethyl ester 6-hydroxy-4-oxo-1,2-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline-5-carboxylic acid and study the biological activity of the obtained compounds.



***Ar** = 2-F-Bn; 4-Cl-Bn; 4-Me-Bn; 2-OMe-Bn; 3,4-(OMe)$_2$-Bn; piperonyl; 2-(4-Cl-Ph)-Et; 2-(4-OMe-Ph)-Et; 2-[3,4-(OMe)$_2$-Ph]-Et; pycolil-3.*

Results and discussions. To prove chemical composition of all synthesized compounds an elemental analysis and ^{1}H NMR spectrum were applied.

Their capacity to keep inflammatory process actively down has studied by a standard method on white rats within oral supplementation comparing to Voltaren.

Analyzing the data of conducted pharmacological trials and results of our previous research, it must be admitted that transferring from alkyl- till arylamides is accompanying with significant increase of anti-inflammatory activity, however this indicator is low than the one of a reference-preparation, and, thus, in sense of search of potential anti-inflammatory agents is of little promise.

Conclusions. The elemental analysis and ^{1}H NMR spectroscopy we used in the study of the structure of the obtained derivatives 6-hydroxy-4-oxo-1,2-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline-5-carboxylic acid. The studied arylalkylamides show a moderate anti- inflammatory activity, but do not exceed reference drugs.