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Searching for new anti-shock substances among 2-phenyliminothiazole derivatives

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The frequency of allergic, autoimmune, immune deficiency diseases increases both in Ukraine and around the world [3]. So an important task of pharmacy is the search for new antiallergic drugs. The purpose of our work was further studying the anti-shock activity of the most active substance synthesized – 2-[4-(4^1-chlorophenyl)-2-phenyliminothiazol-3-yl]-ethanol hydrobromide. The synthesis of this compound was carried out by Hantzsch reaction [2].

In previous papers we described the synthesis of a new series of derivatives of 2-[4-aryl(adamantyl)-2-phenyliminothiazol-3-yl]ethanol and described results of *in silico* studies of pharmacological activity, bioavailability and toxicity of these compounds [2]. Based on results obtained the pharmacological screening for anti-inflammatory activity on the model of histamine edema in mice was studied [3]. As the reference drug claritin was used. It was found that in the majority of substances under research the intensity of the anti-inflammatory activity was dose-dependent. The antihistaminic properties were studied in «Ophthalmic response to introduction of histamine» test in guinea pigs for 3 most active compounds. In this test the activity of 2-[4-(4^1-chlorophenyl)-2-phenyliminothiazol-3-yl]-ethanol hydrobromide was statistically significantly higher than that of other compounds and slightly inferior to the reference drug [3]. Results obtained substantiated the feasibility of further studying the anti-shock activity of the most active substance – 2-[4-(4^1-chlorophenyl)-2-phenyliminothiazol-3-yl]-ethanol hydrobromide on the model of anaphylactic shock in guinea pigs. It has been found that this compound is somewhat inferior (65%) the action of claritin (78%) by its ability to inhibit development of general anaphylaxis.

Studies in this area are continuing.

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