

## ANTIPIRETTIC PROPERTIES OF 1,2,4-TRIAZOLE DERIVATIVES

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Fever is not specific pathological process that is accompanied with temporal temperature increase of a body under the influence of pyrogens. This phenomenon emerged in human and higher animals bodies during the evolution process as protecting and signal function in different pathologies. The usage of antipyretic remedies became a common phenomenon in human's everyday life.

Modern medicine uses a big number of antipyretic remedy. Big segment of the market is occupied by non-steroidal anti-inflammatory products with antipyretic anti-inflammatory and analgesic effect. However while taking it one should take into account the risk of side effect (gastro-, nephron-, neuro-, hepatotoxicity, skin manifestations and hypersensitivity).

Nowadays derivatives of 1,2,4-triazole inherit anti-inflammatory and antipyretic claims with significant benefit from minimum number of side-effects and low toxicity.

The derivatives of 5-(phoxymethyl)-4-R-1,2,4-triazole-3-thiones have been used for experiment. Research of antipyretic activity was conducted at the department of Clinical Pharmacy, Pharmacotherapy and MFE of FPE and Economy of pharmacy (the head of department, M.D., prof. Bilai I. M.).

Study of antipyretic claims of synthesized compounds has been carried out on groups of non-pedigree white rats. Experimental fever was recreated by administrating of 2,4-dinitrophenol (DNP) to the animals. Studied compounds were administrated in half an hour after DNP administration, rectal temperature of body was fixed for an hour. Initial rectal temperature was registered till abdominal injection of DNP.

Acetylsalicylic acid has been used as reference substance. 14 synthetic compounds of different chemical classes have been studied during the experiment of antipyretic activity.

The large majority of investigated substances have showed quite good results due to the fact that its functional groups should theoretically have antipyretic properties.