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PHYSIOLOGICAL IMPORTANCE OF FEVER AND ENDOGENOUS ANTIPYRESIS. SOLUBLE EPOXIDE HYDROLASE INHIBITIORS AS POTENTIAL THERAPEUTIC DRUGS FOR THE TREATMENT OF FEVER

Summary

Fever has accompanied humanity throughout the whole history of our species. Being one of the cardinal signs of infection and disease, for decades it has been treated as a disorder, which at all costs had to be cured. Nowadays, however, fever is recognized as an important, beneficial and tightly regulated immune response. A real threat to health became the episodes of especially high or prolonged fever resulting from failure of thermoregulation mechanisms. Clinical experience shows, that in such cases standard treatment with aspirin-like non-steroidal anti-inflammatory drugs usually remains inefficient. This fact clearly proves the need for constant search for novel therapeutic agents. Pharmacological inhibition of soluble epoxide hydrolase (sEH) activity is a part of such studies. The growing number of evidence indicates, that sEH inhibitors might be used as a safe and effective alternative to currently used drugs.

Key words: : arachidonate epoxidase, endogenous antipyresis, epoxyeicosatrienoic acids, fever, soluble epoxide hydrolase inhibitors