MMSL
Military Medical
Science Letters
Since 1925

Mil. Med. Sci. Lett. (Voj. Zdrav. Listy) 2018, 87(supplementum 1)
ISSN 2571-113X (Online)

MEETING ABSTRACTS

PHARMACOKINETICS OF BIS-PYRIDINIUM MONO-ALDOXIMES

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Bis-pyridinium mono-aldoxime (BPMA) compounds are potential antidotes against organophosphorus inhibitors of either acetylcholinesterase or these of butyrylcholinesterase. From the points of drug distribution and pharmacokinetics essential characteristics were determined (concentration versus time curves).

Experimental results of pharmacokinetics of BPMA will be detailed with special focus on drug distribution and HPLC analysis of oxime K117.

The concentration of BPMAs decreases fast in the body of rats, and thus they fulfil the basic requirement for antidotes: elimination should be as fast as possible. Their elimination curve should be characterized by the term „tenth-life" rather than half-life.

BPMA compounds penetrate into the brain in considerable amounts of their concentration in the serum. As blood-brain penetration can have vital importance, time of the maximum extent of blood-brain barrier should also be conceived as a novel pharmacokinetic parameter.

This research has been supported by Kalász Teaching and Research Co.(Budapest, Hungary), by the NN126968 grant of Hungarian National Research,Development and Innovation Office (Budapest, Hungary) and Ministry of Education, Youth and Sports of the Czech Republic (no. BF17004).