

Abstract

This thesis first briefly mentions the characteristics of the skin and contains a review of current knowledge on the *in vitro* permeation testing of drugs through the skin. It describes the basic data about nerve agents and the possibilities of prophylaxis poisoning warfare agents focusing on preventive transdermal administration.

The experimental work is focused on *in vitro* testing abilities oxime HI-6 and possibly other reactivators enzyme acetylcholinesterase penetrate through pig skin. Experiments were conducted in static diffusion cells Franz type.

The amount of test substance leaked through the skin is determined in the sample of receptor fluid by HPLC.

Keywords

permeation *in vitro*; transdermal; pig skin; Franz cell; substance HI-6; antidota; nerve agents; acetylcholinesterase