Diploma Thesis, Hana Krejčová 2006

Abstract

The theoretical part of thesis provides a brief overview of the transdermal administration of drugs, including the use of transdermal enhancer. Part concerning the CyA includes information about its structure, pharmacological effects, including adverse effects, its use in therapy and application possibilities.

Experimental section presents the results of in vitro permeation experiments on pig skin. Acceptor phase consisted of propylene glycol and Tris-buffer pH 7.1 at a 1:1 ratio. The permeant determination was performed by HPLC with UV detection at 220 nm. It was confirmed that the choice of the acceptor and the mobile phase was appropriate. As a donor samples were used supersaturated CyA systems without enhancer, and also with the addition of 5% or Azone, methyl pyrrolidone or dodecyl pyrrolidone, or 1% of transkarbam 12. All the enhancers in the concentrations increase depot formation in skin, transkarbam 12 although used in the lowest concentration did it most.