Comparative Study of Absorption and Distribution of Dexamethasone-3H after Percutaneous or Oral Administration in Mice and Rats

Author(s)
Makungu James
J P Marty
J Wepierre

Abstract
Percutaneous absorption of dexamethasone in alcoholic solution in mice and rats was low. Permeability constant measured on mice was included between $1.05 \times 10^{-5}$ and $1.39 \times 10^{-5}$ cm/h. Under the site of application, a retention appeared in subcutaneous tissue and skeletal muscles which explained local pharmacological action. In other tissues (plasma, liver, kidney, adrenals and muscles), level of corticoid remained very low. On the contrary after oral administration, dexamethasone was present everywhere, concentration was the highest in liver and kidney.