

〈シンポジウム：“General Toxicology”〉

化学物質の経皮吸収と皮膚の代謝的考察

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Percutaneous Absorption and Metabolism of Foreign Compounds in the Skin

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Abstract

Recent pharmacokinetic investigation has shown considerable interest in a percutaneous absorption and cutaneous metabolism in the skin.

The skin possesses drug metabolic activities, including oxidation, reduction, hydrolysis, and conjugation reactions, although such activities may occur at a relatively low level. However, their pharmacological and toxicological implications will be deduced from facts of their remarkable inducibility and enzyme's localization in the skin-layer, so on.

Percutaneous absorption in normal skin is very limited, but recently, the exact rate of transdermal absorption was estimated on a potent drug, which led to the development of a programmed, systemic drug delivery system. Significant advantages of this route over oral administration have also advocated in recent exposition of factors governing percutaneous absorption. All these data will serve for better understanding about the skin function, and for further research works.