〈原 著〉

試験動物の違いによる皮膚反応の差について ーコンベンショナル、クリーン及びSPFモルモットの比較ー

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Differences of Skin Reactions in Different Test Animals

Comparison between conventional, clean and SPF (Specific pathogen free) guinea pigs

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Abstract

Recently, breeding of guinea pigs with higher grade has been developed and now, clean or SPF grade are used in the experiment of safety evaluation to get more accurate data. But, the comparative skin reactivity between the grade are unknown.

We compared the skin reactivity of these animals in the item of close patch test, cumulative painting test and sensitizing test using various materials.

The results showed no relation between the grade of animals in the close patch test, but in the cumulative painting test and sensitizing test, difference between the grade was observed. In the cumulative painting test, the order of skin reactivity was SPF > clean > conventional. In the sensitizing test, the order of skin reaction was clean > conventional.

Histological observation of the intact skin showed no differences between the grades. Although the causes of the differences in skin reaction between the grades are unknown, we must pay attention in the evaluation of the data which was obtained using guinea pigs of different grade.

Keywords: Skin reaction, Skin irritation, Skin sensitization, Guinea pig, Conventional, Clean, SPF.