〔J. Nat. Cancer Inst., **79** (5), 1159 (1987)〕

Hepatocarcinogenic Activities of Hydroxymethyl Derivatives of 4-(*N*,*N*-Dimethylamino)azobenzene in ACI/N Rats.

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The hepatocarcinogenic potencies of three hydroxymethyl derivatives of 4-(*N*,*N*-dimethylamino)-azobenzene (DAB) were evaluated in a long-term test (400 days) and compared to the potency of 3'-CH_3-DAB. ACI/N rats, known to be less sensitive to azo dye carcinogenesis, were given one of these compounds in their diets for 120 days. The incidence of hepatocellular carcinoma in group 2 (20/20), which was given 3'-CH_2OH-DAB, was much higher than that in any of the other groups : group 1 (2'-CH_2OH-DAB ; 4/19), group 3 (4'-CH_2OH-DAB ; 1/25), or group 4 (3'-CH_3-DAB ; 3/24). These data suggest that 3'-CH_2OH-DAB is the most potent hepatocarcinogen in the series of azo dyes.

〔Yakuri to Chiryō, **15**, 181 (1987)〕

Studies on the Disposition of Suprofen Ointment After Occlusive Topical Application (I)-Absorption, Distribution and Excretion in Rats and Absorption and Excretion in Guinea Pigs-.

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The absorption, distribution and excretion of suprofen (SP) in rats and guinea pigs after the application of 〔^{14}C〕 labeled SP ointment by the occlusive dressing technique for 8 hrs was investigated by radiometry and microautoradiography, and following evidences were obtained ; the percutaneous absorption of SP is affected by barrier effect of the stratum corneum ; SP can be also absorbed through the hair follicles and the SP which was absorbed through the skin is transported to other parts of the body through the vascular system ; the amounts of absorption are approximately 23% in rats and 11% in guinea pigs ; the highest ^{14}C is found in the applied skin.

〔Yakuri to Chiryō, **15**, 195 (1987)〕

Studies on the Disposition of Suprofen Ointment After Occlusive Topical Application (II)-Metabolism, Absorption to Inflammed Site after Single Application, and Absorption, Distribution and Excretion after Consecutive Application in Rats-.

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After the application of ^{14}C-SP ointment to the skin, only SP was found in the applied skin and the plasma and ^{14}C of the urine was mainly accounted by SP. When ^{14}C-SP ointment was applied to the site of carrageenin-induced cutaneous edema, the ^{14}C was quickly and highly distributed in the applied skin. when ^{14}C-SP ointment was applied to rats consecutively six times at intervals of 12 hrs, the blood levels, their variation rate and the urinary and fecal excretion remained almost constant, but the tissue levels showed little change.