

N-Acetyl-L-Tryptophan の毒性研究 (第8報)*

マウスにおける器官形成期投与試験

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Toxicological Studies on N-Acetyl-L-Tryptophan VIII* Teratological Study on N-Acetyl-L-Tryptophan in Mice

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Summary

The teratogenic effects of N-Acetyl-L-Tryptophan was investigated in JCL-ICR mouse. N-Acetyl-L-Tryptophan was intraperitoneally (i. p.) administered to the mice at the doses of 100, 300 and 900 mg/kg/day or orally at the doses of 2,500 and 5,000 mg/kg/day from day 6 to day 15 of gestation. Two-thirds of the mice for the i. p. administration and all of the mice for the oral administration were sacrificed to examine their fetuses, while the rest of the mice for the i. p. administration were allowed to deliver naturally for the observation of their offspring.

Decrease in food consumption was noted in the pregnant mice at the i. p. dose of 900 mg/kg/day during pregnancy, however, the compound at any dose did not affect body weight gain, hematological and biochemical values, gestation period, delivery and nursing instinct.

As to the fetal observation, neither the i. p. nor the oral administration of this compound had any effect on death, body weight, placental weight and incidence of external, skeletal and visceral abnormalities.

Body weight of offspring at birth and its gain by the time of weaning were slightly small at the highest i. p. dose of 900 mg/kg/day, however, which returned to normal upon and after weaning.

Offspring were normal for their external appearance, number of liveborn, skeleton and mortality, furthermore, they acted normally in Irwin's test, Open-field and Water T-maze performance. Reproductive function of offspring was normal and no abnormality was noted on the F₂ generation.

Key words

N-Acetyl-L-Tryptophan, Teratogenicity, Pregnant mice, Fetus, Offspring

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