## N-Acetyl-L-Tryptophan の毒性研究 (第5報)\* ラットにおける器官形成期投与試験

門田雄三,上迫卓司,竹本義枝,丸岡久雄\*\* (昭和55年5月31日受理)

## Toxicological Studies on N-Acetyl-L-Tryptophan V\* Teratological Study on N-Acetyl-L-Tryptophan in Rats

Yuzo KADOTA, Takuji UESAKO, Yoshie TAKEMOTO and Hisao MARUOKA\*\*

## Summary

The teratological studies of N-Acetyl-L-Tryptophan were conducted in Wistar rats. N-Acetyl-L-Tryptophan was intraperitoneally administered to the pregnant dams at the doses of 150, 300 and 600 mg/kg/day and orally at the doses of 2.5 and 5.0 g/kg/day from day 7 to day 17 of gestation. On day 20 of gestation, two-thirds of dams were autopsied for the fetal observation, while the remaining dams were allowed to deliver for the observation of their offspring.

In the peritoneal administration, there were found no abnormal changes in the maternal body weight gain and food consumption, and the fetal observation showed no evidence of the untoward effect of this compound on the number of implantations, death, body weight and N-R (nasal basis-rump) length. Furthermore, there were no external, visceral and skeletal malformation in the fetuses. F<sub>1</sub> offspring's birth weight, live birth index, postnatal growth and behaviour as well as reproductive function were not affected by the administration, and there were no effect of this compound on the number of implantations, fetal death and fetal body weight for F<sub>2</sub> offspring.

In the oral administration, the decrease in body weight gain and food consumption were observed for the pregnant dams at the dose of 5.0 g/kg/day, whereas the increase in death and the decrease in body weight gain were noted for the fetuses at this dose. Any external, visceral and skeletal malformation were not found in them. N-Acetyl-L-Tryptophan at 2.5 g/kg/day did not showed any marked effect on the pregnant dams or fetuses.

## Key words

N-Acetyl-L-Tryptophan, Teratogenicity, Pregnant rats, Fetuses, Offspring

<sup>\*</sup>第4報,本誌

<sup>\*\*</sup>徳島県鳴門市撫養町立岩字芥原115 (〒772) ㈱大塚製薬工場 研究開発部

<sup>\*\*</sup>Department of Research and Development, Otsuka Pharmaceutical Factory, Inc., Naruto, Tokushima, Japan