

# N-Acetyl-L-Tryptophan の毒性研究 (第6報)\*

## ラットにおける周産期及び授乳期投与試験

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## Toxicological Studies on N-Acetyl-L-Tryptophan VI\* Perinatal and Postnatal Study on N-Acetyl-L-Tryptophan in Rats

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### Summary

N-Acetyl-L-Tryptophan was given intraperitoneally to pregnant Wistar rats at the doses of 150, 300 and 600 mg/kg/day from day 17 of gestation to day 21 after delivery, and its perinatal and postnatal effect were evaluated on dams, fetuses and offspring. As for the reproductivity studies, one-half of F<sub>1</sub> pregnant dams were subjected to the fetal examination and the rests were permitted to deliver for the observation of F<sub>2</sub> generation.

N-Acetyl-L-Tryptophan did not affect maternal body weight gain, food consumption, delivery, gestation period, lactation and nursing instinct. F<sub>1</sub> offspring's observation did not show any significant difference in their birth weight, live birth index, mortality, postnatal growth, behaviour and reproductive ability when compared with the control offspring. The number of implantations and fetal death for F<sub>2</sub> fetuses were not significantly different from those for the control fetuses, and malformations were not found either. Only noticeable finding in them was a small decrease in fetal body weight. N-Acetyl-L-Tryptophan had no influence on postnatal growth as well as birth weight of F<sub>2</sub> offspring.

### Key words

N-Acetyl-L-Tryptophan, Perinatal and postnatal, Pregnant rats, Fetuses, Offspring

### 緒 言

N-Acetyl-L-Tryptophan (N-Acetyl-L-Trp) は当社で開発中の7.5%ブドウ糖加アミノ酸注射液(AG-80)において、L-Tryptophan に代り使用される物質

であり、栄養学的には L-Tryptophan と同等の効果を有している<sup>1)</sup>。

今回、ラットを用いて試験し、N-Acetyl-L-Trpを母獣(F<sub>0</sub>)の周産期及び授乳期に腹腔内へ投与して、母獣(F<sub>0</sub>)、仔(F<sub>1</sub>)、胎仔(F<sub>2</sub>)及び仔(F<sub>2</sub>)に及ぼす影響を検討したので報告する。

### 実験材料及び方法

#### 1. 検 体

N-Acetyl-L-Trp は白色の結晶性粉末で、メタノールに溶け、エタノール、アセトンにはやや溶け、水に

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