

N-Acetyl-L-Tryptophan の毒性研究 (第4報)*

ラットにおける妊娠前及び妊娠初期投与試験

丸岡久雄, 門田雄三, 上迫卓司, 竹本義枝**

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Toxicological Studies on N-Acetyl-L-Tryptophan IV*

Fertility Study on N-Acetyl-L-Tryptophan in Rats

Hisao MARUOKA, Yuzo KADOTA, Takuji UESAKO

and Yoshie TAKEMOTO**

Summary

Effects of N-Acetyl-L-Tryptophan on the fertility performance were investigated with Wistar rats. N-Acetyl-L-Tryptophan was administered intraperitoneally at the doses of 150, 300 and 600 mg/kg/day to the males from days 60-80 before mating and to the females from day 14 before mating to day 7 of gestation.

The indexes of mating and fertility were not influenced by the administration, with their resultant percentages from 95-100. Body weight gain, food consumption, organ weight, hematological and biochemical values of pregnant females were not affected by the N-Acetyl-L-Tryptophan, either.

The number of corpora lutea, the number and percentage of implantation, and fetal death and body weight in the treatment groups were not significantly different from the control group.

No external, skeletal and visceral malformation was observed in the treatment groups, while skeletal variations, such as cervical ribs, 14th ribs, asymmetrical sternbrae and non-ossified sternbrae were noted in the treatment and control groups, though not dose-related.

Key words

N-Acetyl-L-Tryptophan, Fertility study, Rats

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 の代りに使用される

化合物である。N-Acetyl-L-Trp が栄養学的に L-Tryptophan と同等の効果を有していることはすでに報告されている¹⁾。

今回, Wistar 系ラットを用いて N-Acetyl-L-Trp の妊娠前及び妊娠初期投与試験を行ったのでここに報

*第3報 本誌

**株式会社大塚製薬工場 研究開発部 徳島県鳴門市撫養町立岩字芥原115 (〒772)

**Department of Research & Development, Otsuka Pharmaceutical Factory, Inc., Muya-cho, Naruto, Tokushima, Japan