

# 흰쥐에 있어서 LY-117018 및 tamoxifen이 이 착상에 미치는 영향

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Abstract =

## Effects of LY-117018 and Tamoxifen on Implantation in Rats

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These studies were carried out to investigate the effects of the antiestrogens, LY-117018 and tamoxifen, on implantation in ovariectomized or intact adult rats.

A quantity of 80 μg of LY-117018 or tamoxifen was given to adult female rats on Day 1, 2, 3 and 4 of pregnancy and investigated the implantation sites on Day 8 of pregnancy.

The rats were ovariectomized at the first day of pregnancy and treated with various doses of LY-117018 or tamoxifen together with progesterone daily from Day 2 to 8 of pregnancy and then investigated the implantation sites on Day 8 of pregnancy.

The results were summarized as follows.:

When a single dose of 80 μg LY-117018 and tamoxifen was given during the first 4 days of pregnancy, the implantation was intensively inhibited in the pregnant rat treated with LY-117018 on Day 2 (14.4±3.5%), 3 (16.3±5.3%) and tamoxifen on Days 2 (17.4±4.6%), 3 (16.3±2.8%) and 4 (13.9±3.5%).

LY-117018 was apt to inhibit more potently the implantation than tamoxifen except on Day 4 of pregnancy.

In rats ovariectomized on Day 1 of pregnancy and treated continuously with 125 μg of LY-117018 and tamoxifen together with progesterone showed the highest implantation rate, compared with the rats treated continuously with different doses of the two drugs. The correlation coefficients between the dosage of drugs and implantation rate were r=0.91 (LY-117018), 0.51 (tamoxifen), respectively, except treatment with 625 μg of the drugs.

Tamoxifen was apt to stimulate the implantation more potently than LY-117018 except groups treated with 625 μg of the two drugs.

## 서 론

Harper와 Walpole(1967)은 임신한 흰쥐와 생쥐에 tamoxifen을 투여한 결과 수정란 착상의 실패, 질 상피 세포의 각질화 방지, 자궁 무개의 증가 억제등과 같은 강한 antiestrogen 작용이 있음을 보고 하였다. 또한

tamoxifen은 동물에 따라서 효과가 상이하여 생쥐에서는 estrogen과 유사한 성질이 있고(Martin과 Finn. 1968; Terenius. 1971; Jordan, 1975; Martin과 Middleton, 1978; Korach와 Ford, 1978; Korach, 1979) 흰 쥐에서는 부분적으로 estrogen과 유사한 성질이 있으며 (Harper와 Walpole, 1966, 1967; Jordan et al., 1977B; Waters와 Knowler, 1981) 병아리의 난관에서는













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