

Dopamine, Dopamine D₁-Receptor 효능제인 SKF 81297 및 Dopamine, D₂-Receptor 효능제인 TNPA의 흰쥐 혈압에 대한 영향

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Effect of Dopamine, SKF 81297, a Dopamine D₁-Receptor Agonist and TNPA, a Dopamine D₂-Receptor Agonist on the Blood Pressure in Rats

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This study was attempted to investigate the effect of dopamine, SKF 81297, a dopamine D₁-receptor agonist, and TNPA, a dopamine D₂-receptor agonist, on the blood pressure in rat. Dopamine exhibited the hypertensive action in proportion to the doses of 1.0, 3.0 and 10.0 $\mu\text{g}/\text{kg}$ i.v., these hypertensive action of dopamine was blocked significantly by SCH 23390, a dopamine D₁-receptor antagonist, on the other hand, more potentiated by raclopride, a dopamine D₁-receptor antagonist. SKF 81297 produced hypertensive action in a dose of 1.0 $\mu\text{g}/\text{kg}$ i.v., whereas hypotensive action in proportion to administered doses 3.0 and 10.0 $\mu\text{g}/\text{kg}$ i.v., these hypertensive action of SKF 81297 in a dose of 1.0 $\mu\text{g}/\text{kg}$ i.v. was not influenced by SCH 23390 or raclopride, but hypotensive action of SKF 81297 in the doses of 3.0 and 10.0 $\mu\text{g}/\text{kg}$ i.v. was weakened significantly by SCH 23390, but more strengthened by raclopride. TNPA showed the hypotensive action in inverse proportion to administered doses of 1.0, 3.0 and 10.0 $\mu\text{g}/\text{kg}$ i.v., these hypotensive action was reversed to hypertensive action in inverse proportion to the administered doses of TNPA by SCH 23390 and raclopride.