● Pilocarpine 및 Atropine이 토끼의 악하선 혈류량에 미치는 영향에 관한 연구

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체중 2Kg 내외의 집 토끼를 사용, 악하선의 혈류량 변화를 전기전도도를 이용하여 pilocarpine 및 atropine을 투여, 다음과 같은 결과를 얻었다.

1. Atropine투여군에서는 악하선의 혈류량에는 영향을 미치지 않으나, 심장 박동수는 약물농도 증가에 따라서 감소하였다.
2. Pilocarpine 투여군에서 악하선의 혈류량 증가가 컸으며, 맥박수는 약물농도 증가에 따라서 감소하였다.
3. Atropine 및 pilocarpine 복합 투여군에서는 pilocarpine단독 투여군보다 악하선의 혈류량증가가 현저히 감소하였다.

● 백서에 있어서 치은 동맥 경화증에 관한 실험적 연구

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저자는 Saline, ACTH投與 및 副腎剔出이 白鼠의 齒齦動脈에 미치는 影響과 血淸內의 Cholesterol 量의 變化를 觀察하기 爲하여 體重 180gm內外의 成熟한 雌性 白鼠 100匹을 對象으로 이를 4群으로 나누어 實驗을 實施하였다. 即

①正常對照群(10匹)
②Saline 注射群(30匹) : Saline一週群(10匹)
Saline五週群(10匹)
Saline七週群(10匹)
③ACTH 注射群(30匹) : ACTH一週群(10匹)
ACTH五週群(10匹)
ACTH七週群(10匹)
④副腎剔出群 (30匹) : 副腎別出後一週群(10匹)
副腎剔出後五週群(10匹)
副腎剔出後七週群(10匹)

Saline 注射는 體重 100gm當 0.2cc씩 2日 간격으로 臀部에 筋肉注射하였으며 ACTH 注射는 體重 100gm當 0.3unit式 2日 간격으로 臀部에 筋肉注射를 實施하였고 副剔腎出은 兩側性으로 實施하였으며 血淸內의 Cholesterol量을 定量하였다. 實驗後 모든 白鼠의 齒齦動脈, 舌動脈, 冠狀動脈, 胸部大動脈 腹部大動脈의 組織을 切取하여 이를 組織學的인 方法으로 觀察하여 다음과 같은 結論을 얻었다.

1. Saline 注射群은 動脈의 組織學的인 異狀을 볼수 없었으며 血淸內의 Cholesterol量도 正常對照群과 類似하였다.
2. ACTH 注射群은 內膜의 纖維性 變性과 中膜의 變性으로 因하여 纖維가 성글게 配列되어 있으며

Ginseng and their effects in comparison with Diazepam on 0.6% and 2.0% lidocaine and procaine toxicity were observed in aggregated mice. at the same time, the effect of crude saponin fraction on pentobarbital sleeping time was observed.

The duration of righting reflex-loss induced by pentobarbital was markedly prolonged by the pretreatment of large dose(100mg/Kg) of crude saponin fraction.

Large dose of Ginseng water extract, methanol extract and crude saponin fraction increased 0.6% lidocaine toxicity, while decreased 2.0% lidocaine toxicity.

Diazepam(1.0mg/Kg or 5.0mg/Kg) increased 0.6% lidocaine toxicity, while decreased 2.0% lidocaine toxicity.

Study for effectiveness of pilocarpine and atropine to blood flow in the rabbit submaxillary gland

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This experiment was performed to study the effectiveness of cholinomimetic drug (pilocarpine) and cholinergic blocking drug(atropine) to blood flow in the rabbit submaxillary gland by means of impedance rheograph.

It was used that the jugular vein as a route of the drug administration and that the carotid artery to get the blood pressure by the pressure transducer(Narco Co.). The gland was intactly exposed alone and grounded on aluminum foil.

Fifteen rabbits about 2kgs of body weight were divided to three groups, to the first group atropine of last dosage 1mg, 3mg, 5mg/kg of body weight, pilocarpine of last dosage 0.05, 0.15, 0.25mg/kg for the second group and the third group was given pilocarpine of last dosage 0.05, 0.15, 0.25, 0.50mg/kg after blocking wath 2mg/kg of atropine.

Two needle electrodes were inserted into the gland with a proper distance and connected continuously to the impedance rheograph, high-gain preamplifier and physiograph to obtain rheogram on the physiograph.

Amplitude of experimental rheogram was compared to that of control.

The results were as follows :

1. The blood flow of submaxillary gland was not altered in atrophine group and heart rate was decreased in proportion to the concentrationa of the drug.
2. In pilocarpine group, the blood flow of submaxillary gland was increased but the heart rate was decreased in proportion to the concentration of the drug.
3. In atropine and pilocarpine group, the increase of blood flow was decreased markedly than that of pilocarpine group.