FARMACOLOGY ACTION OF NEW CONNECTION DERIVATIVES 5,7-DIHYDRO- 1H- PYRROLO[2,3-D] PYRIMIDINE

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Inflammation is the local reaction of the living tissue on the damage that can occur as a disease with involving all systems of organism. The cause of the disease may be differtnt from the action of microorganisms and the action of physical or chemical factors. Pharmacological regulation of the inflammatory process is the most actual problem of modern medicine.

The aim of our investigations was to study antiinflammatory activity of derivatives 5,7 – dihydro-1H-pyrrolo[2,3-d] pyrimidine on the model of carrageenan edema paws of rats. The model of acute carrageenan inflammation stmulate phase and causes inhibition of prostaglandin of kinin system.

The research was conducted on model of carrageenan edema paws of nonlinear white rats mass 180-200g. Compounds where investigated in dose to 5, 10 and 15 mg/kg animal mass and the reference preparation - voltaren in dose 8 mg/kg was injected 1 hour before subplantarly injection of flogogen (1% solution of carrageenan in dose 0,1 ml). After 4 hours the animals were taken out the experiment and with the help of the Zaharevskii onkometr they measured the size of one foot before injection the carrageenan and after 2-4 hours after injection the carrageenan.

Antiexudative activity of investigated compounds was determined be its ability to reduce the development of edema in compare with the control, that was signify in percentege. This testified how this compound inhibits the carrageenan edema development relative to the control, where the value is taken as 100%.

In the result of the experiment was determined that connection in dose 5 mg/kg displayed the antiinflammatory activity 35,1%, 10 mg/kg – 44% and in dose 15 mg/kg - 39% which on activity is inferior the reference preparation - voltaren – 45,4%.

Thereby the connection in dose 10 mg/kg is perspective for the further research as an antiinflammatory agent.