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PROPERTIES OF CARDIOPROTECTIVE PREPARATIONS AND THEIR ANTISTRESS EFFECT

One of the main tasks of modern medicine is to study the development and progression of cardiovascular pathologies as a result of stress. The impact of stress factors, even on a healthy heart, causes a gross violation of its work.

Experimentally prove the possibility of pharmacological protection of the heart from emotional stress with the help of cardioprotective drugs that have anti-stress action with therapeutic and prophylactic purpose. Therefore, the following drugs with anti-stress action were taken - plant adaptogen eleuterococcus, tranquilizer phenazepam, nootropic piracetam and tryptophanum metabolite nicotinamide, which as a stress protector have a general protective effect under conditions of Emotional stress, including on the heart. Some of the positive effects of these stress-protectors in relation to the cardiovascular system are known from the literature [1].

Experiments were performed on 340 rats of both sexes with body weight 150-250 g and combining it with a model heart disease – pituitrinic coronarospasm and calcium arrhythmia [2].

Emotional stress was modeled using the "Conflict of Afferent Irritations" technique, the stressful effect was on 4 h during 2 days and studied the effect of Siberianginseng (0,5 ml/kg), Phenazepamum (2,5 mg/kg), Piracetamum (200 mg/kg) and Nicotinamide (50 mg/kg) on heart activity. The cardiovascular function state was evaluated by integral rheography, blood pressure and ECG (electrocardiogram). The main indicators studied catecholamine, electrolyte, lipid metabolism and myocardial enzyme [3].

Investigated drugs that have anti-stress effect should have a stabilizing effect on the indicators of stressful changes in the functional state of the heart and its metabolism.

The universal mechanism of cardioprotective action has a membrane-cytoprotection, the restoration of all types of cardiomyocytes, substances, antiarrhythmic and anti-isomic effects. Piracetam is the most effective means of research. It normalizes the largest number of investigated parameters of the functional state of the heart during emotional stress [4].

Thus, drugs with anti-stress effect of Siberianginseng, phenazepam, piracetam and nicotinamide have a cardioprotective effect under emotional stress. The investigated drugs have cardioprotective properties, therefore, their inclusion in a comprehensive treatment during emotional stress is appropriate.

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