

Original Article

Experimental, electronmicroscopical and biochemical researches about disseminated hemodynamic myocardial infarctions by beta-adrenergic stresses.

The efficiency of therapy with magnesium ascorbate

Vasile CANDEA¹, Dezideriu LAKI^{1,2}, Elenea RATEA², Corneliu ZEANA³

1. Academy of Romanian Scientists

2. "Victor Babes" National Institute Bucharest, Romania.

3. Emergency Hospital, Bucharest

Abstract

The nonatherosclerotic hemodynamic ischemic cardiomyopathies were induced on the guinea pigs and Wistar rats, by beta-adrenergic aggressions of Isoprenalin (ISOP). This it was made for an electronmicroscopical and biochemical thoroughgoing study of the hypoxic coronary spastic lesions.

Ultrastructurally, they were noticed some hypoxic catecholaminic lesions, until they were got disseminated myocardial infarctions. Biochemical, ATP and magnesium depletion, hydroelectrolitic perturbations and increase of serum LDH levels were predominantly.

In case of the lots which got both injectable ISOP and Magnesium Ascorbat with myocardial protector substances- Magnobil (Merck), the results were benefic. The ultrastructural lesional images didn't outrun the limits of reversibility and biochemical, the ATP and Mg²⁺ levels returned to the control levels.

The efficiency of this medication was certified at the patients with myocardial ischemias by improvement of clinical condition and EKG images.

Keywords: *experiment, beta-adrenergic aggressions, Isoprenalin, electronic microscopy, biochemistry, disseminate hemodynamic infarctions, therapy with Magnesium Ascorbat.*