

## OBSERVATIONS OF APOPTOSIS IN MYOCARDIUM IN SOME CARDIOPATHIES ON INTRAOPERATIVE AND EXPERIMENTAL MATERIAL

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**Abstract.** *With a view of apoptosis signification in progression of cardiopathies, our studies have been used morphological investigations on specimens from human intraoperatory biopsies and experimental material. It has been used histologically, histoenzimologically, electronmicroscopically and in some cases molecular biologically investigations. The differentiation between necrosis and apoptosis were difficult, these being isolated thought decreasing cellular volume, cytoplasm densification, slow lose of organelles affection, except mitochondria and nucleus. The certification was due by molecular biology techniques applied TUNEL-DIG and propidium iodide methods which distinguished no reversible lesions of DIVA from apoptotic bodies in myocardial infarcts and myocardium sclerosis border lines, in chronic ischemia areas of hibernation, myocardial hypertrophies, in advanced heart failure. On experimental models similar to angina pectoris(ischemic and reperfusion alterations) and chronic ischemia through partial coronary obstructions, it had appeared apoptotic images like those which are find in human pathology. There are mentioned genetic mechanisms involved in apoptosis and stimulating factors that perturb its, determined the progression of heart failure, and the benefic therapy that would have applied.*

**Keywords:** apoptosis, myocardium pathogenesis, cardiopathies, experimental researches of apoptosis, long term therapeutic prospect.

### 1. Introduction

In the last decades, the studies about apoptosis, especially concerning molecular mechanisms, have progressive increased. In the frameword of these dynamic studies, we shall try to present our experience about apoptosis in cardiopathies because in literature there is a few data about this subject. In this sense we have see again the extensive material which we have gathered in almost 3 decade [1, 2, 3, 4, 5, 6, 7, 8, 9, 10] and have processed the recent harvest references [11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26]. We have compared the results of our researches with those who are appeared in literature and we do some reflection about the pathogenesis of these lesions.

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