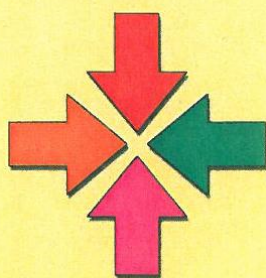


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# CLINICAL APPLICATION OF IMMUNOLOGY

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***"Suspect Immune clue until proven otherwise"***



## Antiphospholipid Syndrome in Patients with Acute Myocardial Infarction

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**SUMMARY:** In 107 patients with acute myocardial infarction manifestations, aged 27 to 55 years, antiphospholipid antibodies (anticardiolipin and anti  $\beta_2$  glycoprotein 1 antibodies), thrombotic adhesion marker CD31 and some parameters of fat exchange (total cholesterol and triglycerides) were investigated. It was found that 22 of the selected patients (with history of manifestation of antiphospholipid syndrome) were positive for antiphospholipid antibodies (aPL). A second investigation of eleven of the aPL (+) patients revealed increased thrombotic activity, and in some of them this was combined with development of thrombotic incidences. Timely detection of antiphospholipid syndrome in young patients with acute myocardial infarction is crucial in view of working out preventive and treatment strategies.

**Key words:** antiphospholipid syndrome, antiphospholipid antibodies, CD31, acute myocardial infarction.

### Introduction

The antiphospholipid syndrome (APS) is characterized with arterial and/or venous thrombosis, recurring abortions, moderate thrombocytopenia, combined with the presence of antiphospholipid antibodies (aPL), [1]. About 2.5 million people in Europe and USA suffer from various clinical manifestations of the disease. The antiphospholipid syndrome is found in a high percentage of acute myocardial infarction patients, although the latter is not a frequently reported manifestation [2, 3, 9, 21, 29]. On the basis of progressive increase of cardiovascular disease death rates in advanced societies [17], this fact poses the important issue of timely detection of APS in young patients with acute myocardial infarction (AMI), in view of working out of preventive and treatment strategies.

About 200,000 people in Bulgaria have ischemic

heart disease (date from National Health Insurance Fund) and 15,000 are diagnosed with AMI every year. For the last 25 years, Bulgaria has ranked among the first countries with increasing disease and mortality rates among men in active age with acute coronary manifestations [20].

Reports in the literature referring to the frequency of APS in AMI are contradictive [10, 13, 33]. There is not enough information available on the problem in Bulgaria. This gave us the reason to put the following

### Aim

The study aims to determine the frequency of APS, the presence of aPL and thrombotic activation status in AMI patients.

### Materials and Methods

The study included 107 patients with AMI, aged from 27 to 55 years, divided into two groups. The 57 patients in the first group had a history of frequent arterial or venous thrombosis, which, in some

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