

PhD Summary
CYTOLYTIC ENZYME CHANGES IN ACUTE CORONARY SYNDROMES
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The introduction comprises 4 pages with information regarding the reason for choosing the topic and the objectives proposed for the experimental research.

Chapter I, **Data Synthesis from Scholarly Articles on Acute Coronary Syndromes**, comprises 14 pages presenting types of acute coronary syndromes, the pathogenesis of acute coronary syndromes, clinical data in acute coronary syndromes and biochemical markers in acute coronary syndromes

Chapter II, **Comments on Some Biochemical Indicators in Acute Coronary Diseases**, comprises 26 pages presenting the main aspects of protein metabolism which impact coronary diseases, lipid metabolism in coronary diseases, some discussions on carbohydrate metabolism and coronary diseases and blood enzyme activity in patients with coronary heart diseases.

Chapter III, **Research Material and Specific Methods**, comprises 15 pages presenting the research material and the specific methods used. The biochemical measurements were done on 1076 patients in the period 2008-2012 within Bacau District Hospital. To determine the intended biochemical parameters we used the following devices: Cobas Integra 400 Plus automatic analyser and Compact PATHFAST immune analyser. The chapter continues with the way in which blood glucose, lactate dehydrogenase activity, direct and total bilirubin levels, urea levels, creatine levels, uric acid levels, alanine aminotransferase activity, aspartate aminotransferase activity, gamma glutamyltransferase activity, creatine kinase activity, triacylglycerol content, total cholesterol content, HDL cholesterol levels, LDL cholesterol levels, troponin I levels and C-reactive protein levels were measured. The chapter ends with the statistical analysis of the obtained data resulting from the PhD research.

Chapter IV, **Results and Discussions**, comprises 209 pages presenting the process of monitoring cytolytic changes and associated risk factors in a number of 1076 subjects with coronary diseases investigated in the period 2008-2012 as well as the clinical-biological monitoring of the patients with changes in cytolysis and of the atherogenesis associated risk factors, among which C-reactive protein and troponin I.

The distinctive values of the determined parameters identified in the patients, grouped according to the type of coronary disease, are recorded in separate tables and ordered according to the subjects' age and sex. The patients were grouped in the following age groups: 21-35 years, 36-50 years, 51-65 years and over 65 years. This way of organizing the obtained results enabled the statistical analysis of data. It also helped emphasize the changes of the biochemical indicators established for the five diseases targeted: angina, chronic ischemic pain, hypertension associated with ischemic pain, hypertension and myocardial infarction (heart attack).

The conclusions present the results obtained as part of the research. The monitoring process of changes in cytolysis in patients, grouped according to age and sex and suffering from one of the following coronary diseases: angina, chronic ischemic pain, hypertension associated with ischemic pain, hypertension and myocardial infarction (heart attack), was done by determining biochemical indicators which show the reaction of the carbohydrate, lipid and protein metabolism of the human body to the coronary diseases fore mentioned. The analysis of the variation limits for each of the biochemical indicators determined (glucose, LDH

activity, triacylglycerols, cholesterol, LDL, HDL, alanine aminotransferase activity, aspartate aminotransferase activity, creatine kinase activity and gamma glutamyltransferase activity, total and direct bilirubin, uric acid, creatinine and urea) allowed us to determine biochemical parameters with atherogenesis associated risk factors. The measurement of C-reactive protein in patients with changes in cytolysis and the identification of the cardiac troponin I in patients with heart attacks show differences in terms of age and sex groups.

The bibliography comprises 153 books and articles and 8 useful web sites.

List of scientific papers published.

Ph.D. candidate's CV

Key words: acute coronary syndromes, angina, chronic ischemic pain, hypertension associated with ischemic pain, hypertension and myocardial infarction (heart attack).