

BOOK REVIEW

Avtandilov G.G., N.I.Jablučonski, K.D. Salbiev,
L.M.Nepomnjaščih:

Quantitative morphology and mathematical modelling of myocardial infarction (Kolichestvennaja morfologija i matematičeskoe modelirovanie infarkta miokarda).

Published by "Nauka" Sibirskoe otdelenie, Novosibirsk 1984, 284 pages, 59 tables and 5 enclosures

The pathology of the cardiovascular system represents one of the most important problems of modern medicine. Recently the need has arisen to discover mathematic laws in the pathomorphogenesis of these diseases especially in myocardial infarction (MI). The authors have carried out extensive systematic researches in tannatological and experimental material with the use of clinico-anatomical, histological and electronmicroscopic methods of analysis. The results were used in the mathematical modelling of the disease.

The book has 7 chapters. The planned quantitative pathomorphological researches are given in the introduction. The morphometry of the heart and coronary arteries in the normal heart and with MI and the pathology of the blood circulation in the myocardium are described too. A special chapter deals with the stereometrical study of the normal heart and experimental MI in the rat. The stereological characteristics of ultrastructural manifestations of ischemic myocardial necrosis and its neighbouring zones are stressed. The data about the streological characteristics of the human myocardium during the treatment of infarction, the kinetics of circulating leukocytes, the mathematical model and prospect for optimum treatment of infarction are shown. In the last chapter a clinical and morphological analysis of MI, based on correlative and regressive analysis, is given. Uniform forms which are needed

for the study of the cardiovascular system are enclosed in the book.

The work will attract the attention of clinicians, morphologists and mathematicians who deal with the problem of the origin, course and treatment of MI.

Olga Vraspir-Porenta

FORTHCOMING MEETING

7th International Congress for Stereology

will take place in Caen, France, September 7-11, 1987.

Further information:

Dr. J.L. Chermant
Equipe Matériaux-Microstructure
LA 251
Université de Caen
14032 Caen Cedex
France