

AGING AND THE HEART. A POST-GENOMIC VIEW

Edited by José Marín-García. Springer, United States. 2008: 568 pages, 42 figures, and 44 tables. ISBN 978-0-387-74071-3.

The first impression one gets when opening this book is that this text picks up where others leave off. There are lots of books in English and Spanish that have addressed the subject of cardiac aging monographically. Normally, these books follow a highly classical structure in more or less detail. They begin with a series of chapters designed to explain the effects of aging on the morphology, both macroscopic and microscopic, of the different structures that make up the heart as well as its functional response at rest and during exercise. Then, they usually focus on the different pathological changes that we may find in the elderly heart patient, explaining the most characteristic aspects and the clinical challenges that arise from the point of view of clinical evaluation and therapeutic approach.

This is not the case with this book. Here, the players are the cell and the molecule. The interpretative instruments used here are genomic, proteomic, recombinant DNA, and other techniques of this type. As stated by the author in the introduction, it tries to introduce new ideas in light of new advances. In my judgement, it not only tries, it succeeds.

In the first part, it addresses what the author calls "a post-genomic view of overall and cardiac aging." The most classic theories on these subjects are reviewed thoroughly in a clear summary. The second part includes a very innovative chapter on the types of techniques used to advance this field, and updates the molecular and cellular phenotypes of cardiovascular aging. In the third part,

it analyses the correlation between the cardiovascular system and the different organs and systems, always from the perspective on which the book is entitled.

Then there is a more extensive section, with different chapters dedicated to the main pathological processes that may affect the elderly. The fifth section is completely dedicated to matters of genetics. The sixth section specifically addresses "treatments" and includes matters related to translational research, pharmacogenomics and cellular therapy. It also analyses the role that nutrition and physical activity play in this field. Finally, the book concludes with a section dedicated to examining the future of research related to aging.

As a whole, this book is fascinating. At first it may be difficult for those of us who, because of our role as clinicians, may not be accustomed to the language it uses. However, since it introduces a field that no one with a minimum amount of scientific interest will be able to avoid in the near future, I highly recommend that it be read. It is recommended for cardiologists as well as geriatricians and other specialists who treat these types of patients in their daily practice. It is also unquestionably recommended for physiatrists, geneticists, biogerontologists and generally anyone who works in the realm of research on this field.

It should be mentioned that its author, principal and almost exclusive editor (there is minimum input from the other 2 authors) is a cardiologist, a compatriot of ours from Lorquí (Murcia) who directs the Molecular Cardiology and Neuromuscular Institute in Highland Park, New Jersey. Be sure to congratulate and thank him for his effort and wise decision to take on and succeed in a work such as the one mentioned here.

José M. Ribera Casado

Servicio de Geriátría, Hospital Clínico San Carlos,
Madrid, Spain