Cardiac Management in the Frail Elderly Patient and the Oldest Old
Cardiac Management in the Frail Elderly Patient and the Oldest Old
When I was invited to write this foreword, I wondered whether a new book on geriatric cardiology might be useful in the present era of accessible scientific information. I came to a positive conclusion for several reasons: first of all, because of the continuous general population ageing process; in the second place, because the tremendous technological progress in the cardiology field over the last three decades provided new diagnostic and therapeutic tools, potentially helpful for cardiac disease treatment in elderly patients, where this is prevalent; and lastly because the complexity of elder cardiac patients – due to their frailty, comorbidities and disabilities – makes the clinical decision-making process particularly difficult, if we consider that life and end-of-life quality, rather than mere survival, are the outcomes to be reached.

Such complexity can be fully captured and efficiently managed only through a comprehensive geriatric assessment, a specific clinical methodology developed by geriatricians many years ago, and validated by solid evidences including several randomized trials.

The essential need for defining instruments and objectives of geriatric cardiology is reinforced by the evidence that the burden of cardiovascular disease constantly increases with ageing. More than 80% of deaths due to coronary artery disease, for example, occur nowadays in patients older than 65 years, and other common causes of cardiovascular deaths, such as congestive heart failure or valvular heart disease, follow a similar age-associated pattern. In contrast with this remarkable epidemiological paradigm, cardiology textbooks and guidelines often dedicate a very limited attention to this complex clinical scenario. As an example, it is only in the most recent edition of the popular *Braunwald’s Heart Disease* textbook that geriatric cardiology gained an appropriate relevance.

Indeed, the need for specific geriatric assessment has already been taken into account by important cardiological subspecialties, such as interventional cardiology, where frailty and non-cardiac comorbidity evaluation is becoming a reliable method in risk stratification of elder candidates for invasive procedures, such as transcatheter aortic valve implantation (TAVI). It has been proven that the short-term and midterm outcomes of this new interventional procedure are largely predicted by the physical and cognitive functional status of older patients. We expect that an in-depth knowledge of those frailty and comorbidity components that maximally affect the final outcomes independently from age will improve the selection
process of older patients who will mostly benefit either from TAVI or from cardiac surgery.

Hence, I think that this book on Cardiac Management in the Frail Elderly Patient and the Oldest Old has the merit of focusing mainly on those areas where scientific advances in geriatrics have changed the diagnostic and therapeutic approach to older cardiac patients.

The authors belong to a team of medical professionals from the Division of Geriatric Cardiology and Medicine that has been active at the University of Florence for over 50 years; all of them are involved in managing older cardiac patients in an intensive care setting and in doing scientific research in the area of gerontology, geriatrics and, specifically, geriatric cardiology. The invitation to write this foreword is a privilege and an honour for me: having directed this same team for many years and contributed to its professional and scientific growth, it is a great satisfaction for me to see that, after my retirement, its members were able to keep up with the progress of geriatric cardiology at both national and international level.

Florence, Italy

Giulio Masotti
In Western countries, cardiovascular diseases still represent the main cause of death, particularly in older patients. However, primary and secondary prevention has successfully reduced the incidence of cardiovascular events, improving life expectancy and leading to a demographic transition characterized by an increase of older and oldest old patients. Nowadays, cardiovascular diseases occur later in life and progressively increase with advancing age; as a consequence, patients referred to the cardiologist are usually old and frail subjects, presenting with several geriatric comorbidities and disabilities which influence the clinical management. This is why the geriatric expertise is needed in modern cardiology, in order to successfully manage the complexity of cardiac patients according to evidence/guidelines-based clinical practice.

In 1997, William W. Parmley, editor-in-chief of the *Journal of the American College of Cardiology*, called into question the management of old, frail patients affected by cardiovascular disease, focusing on the relationship between different specialties: “[…] Are we currently practicing geriatric cardiology? Yes and no. Yes because we care for this age group, and no because we are less well prepared to fully coordinate the care of the frail elderly […] We need to learn from the geriatricians those elements of care that will fully qualify us to practice geriatric cardiology”. Twenty years later, geriatric cardiology still has not acquired the central role Parmley hoped for and it still is a matter of debate.

Guidelines-based clinical practice is limited by the absence of evidence referring to complex elderly patients; indeed, the majority of clinical trials do not include frail subjects with a high comorbidity burden and a higher risk of drug interactions and side-effects, and therefore being poorly representative of the real world. In addition, an ageist approach is so common in everyday practice that older patients are frequently excluded by diagnostic workup and treatment options, thus influencing and worsening their prognosis and quality of life. In this context, it is necessary to promote the geriatric culture, which faces the complexity of these patients through a multidimensional assessment, integrating different medical specialties and competences. Geriatric cardiology therefore aims at introducing crucial concepts of geriatric medicine – known to be the specialty of frailty and complexity – into the cardiology care system.

This book does not aim at being a comprehensive textbook of geriatric cardiology, but rather at providing clinicians with the geriatrician’s awareness and point of
view, in order to favor a more appropriate decision-making in the management of the frail elderly and oldest old patients – the present and future protagonists of medicine. To this end, we focus on some crucial aspects of cardiovascular diseases in these patients and illustrate how to apply comprehensive geriatric assessment to the major topics of clinical and scientific relevance, on the basis of the experience of professional geriatricians and cardiologists.

Florence, Italy

Andrea Ungar
Niccolò Marchionni
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