Essentials in Stable Angina Pectoris

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This book is dedicated to
My wonderful wife, Marta, for her
unconditional love and continued
support and inspiration; my father, who
is over 90 years of age and still practices
medicine with great care and devotion;
and to all medical practitioners who
strive to improve their knowledge to
provide better care for their patients.

Preface

Stable angina pectoris affects a large proportion of individuals in the general population. Recent data indicate that approximately seven million American people suffer from angina. This not only is a very frequent condition but one associated with an increased risk of major cardiovascular events, including myocardial infarction and cardiac death. Chronic stable angina also represents a major financial burden to many individuals affected by the condition and to health services worldwide. Angina is often, but not exclusively, caused by obstructive atherosclerotic coronary artery disease. Coronary atherosclerotic plaques causing progressive stenosis of the arterial lumen can lead to myocardial ischemia as a result of the restriction they impose to coronary blood flow. Coronary stenoses may thus limit the ability of the coronary circulation to meet an increased myocardial oxygen demand. The classical definition of angina based on the above mechanism is, unfortunately, applicable almost exclusively to myocardial ischemia caused by obstructive coronary atherosclerosis. There are, however, many other mechanisms beyond obstructive coronary artery disease that can lead to angina. Indeed, dynamic, functional mechanisms may play a key role in the genesis of angina both in the presence and in the absence of epicardial coronary artery obstructions. Abnormalities of the coronary microcirculation, which have remained elusive to conventional imaging for many years, are now accepted to play a role in “microvascular angina”, a condition which is now finally capturing the attention of physicians on both sides of the Atlantic. Microvascular angina is discussed in this book in a specific chapter. The

functional aspects of microvascular angina, its clinical presentation and prognosis, as well as the diagnostic tests used for the assessment of microvascular dysfunction are topics discussed in this book. This work also includes clinical diagnostic and therapeutic algorithms, thus trying to bring this topic closer to the practicing cardiologist. A chapter has been devoted to address the different clinical presentations of angina in women and the challenges posed by the many diagnostic and therapeutic differences determined by gender. The rational treatment of angina depends largely on the understanding of the causes and mechanisms leading to angina pectoris in the individual patient. This monographic work presents current treatments as recommended by the International guidelines but also introduces new concepts regarding unmet needs in the management of subgroups of patients with coronary artery disease as well as those affected by microvascular angina. The ultimate aim of this work is to assist the managing physician to identify the different forms of angina pectoris that may come to their attention, all of which pose important diagnostic and therapeutic challenges. In this book I argue that as the current definition (and the understanding) of angina does not necessarily encompass all of the various presentations and pathogenic mechanisms of angina, a change of paradigm is required to serve our patients better.

London, UK

Juan Carlos Kaski

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