

Prevention and Treatment of Ischemic Heart Disease and Atrial Fibrillation

Update on the two major causes of death and disability

Dr George K. Andrikopoulos

Director of the 1st department of Cardiology and director of the department of Electrophysiology and Pacing, Henry Dunant Hospital

Ischemic Heart Disease (IHD) is the leading cause of mortality and disability in the industrialized world. In addition, a dramatic increase of IHD incidence has been observed at the so called developing world during the last decades. Although in most of European countries the incidence of IHD is falling, the prevalence of IHD in the general population is still high mainly due to the increase in life-expectancy and due to the remarkable advances in cardiovascular disease therapeutics which contributed to markedly decreased case fatality of major cardiovascular events. On the other hand, advances on prevention of IHD have been tempered by the accumulation of cardiometabolic risk factors, which increase the prevalence of diabetes, hypertension, and dyslipidemia at the population level. Novel promises from pharmacotherapy to prevent atherosclerosis include a variety of genetic-based therapies, like PCSK9 inhibitors to reduce LDL cholesterol and canakinumab, an anti-inflammatory autoimmune drug, which have been shown to reduce cardiovascular events and improve prognosis of our patients.

Atrial fibrillation is the most prevalent arrhythmia, affecting 3% of the population and up to 15% of the elderly. Atrial fibrillation is the leading cause for hospitalization due to arrhythmia globally and is responsible for 25% of strokes and consequently is a disease of profound socioeconomic importance and an important contributor for increased medical costs. During the last decade, the use of direct oral anticoagulants has substantially improved the management of cardioembolic risk because of atrial fibrillation but advances on pharmacotherapy to prevent atrial fibrillation have been modest. On the contrary advances on invasive therapy of atrial fibrillation using catheter ablation of atrial fibrillation have improved the management of this disease which has a significant influence not only to life expectancy but also to the quality of life of affected patients.