

Review Article

Cardiovascular diseases in the elderly

Fakhrzadeh H (MD)*¹, Sharifi F (MD, MPH)²

¹Associate Professor, Department of Cardiology, Elderly Health Research Center, Endocrinology and Metabolism Research Institute, Tehran University of Medical Sciences, Tehran, Iran. ²PhD Candidate in Clinical Epidemiology, Elderly Health Research Center, Endocrinology and Metabolism Research Institute, Tehran University of Medical Sciences, Tehran, Iran.

Abstract

The Iranian elderly population is rapidly growing. Currently more than 5 million Iranians are over 60 years of age which corresponds to nearly 7.26 percent of the population of the country. It is estimated that more than 10 percent of the population of the country will be elderly in the forthcoming twenty years. Structural and physiological changes which occur in the elderly cardiovascular system include: stiffness of the vasculature, decreased relaxation capacity of the heart during diastole, decreased efficiency of cardiac contraction during exercise, weakened heart muscle response to stimulation by adrenaline, and orthostatic hypotension. In the elderly people we are confronting with increased frequency of cardiovascular diseases especially myocardial infarction, stroke, isolated systolic hypertension, calcific aortic stenosis, orthostatic hypotension, and syncopal attacks due to sick sinus syndrome, complete heart block, atrial fibrillation or other rhythm disorders. Alteration in cardiovascular status in the elderly has undesirable effects on their quality of life and longevity. Myocardial infarction is the most common cause of death in the elderly; however cardiac arrhythmias and valvular heart disease are other important cardiovascular disease in the old people. Diagnosis of these disorders in the elderly requires special consideration since coexistence of structural/functional changes in the old age with cardiovascular disease would alter the classic features of these disorders and result in delay in their appropriate management. Biological aging as evaluated by reduced telomere length has a strong impact on the incidence of cardiovascular disorders especially coronary heart disease and chronic heart failure. This phenomenon could possibly explain interindividual susceptibility to cardiovascular disorders.

Keywords: Cardiovascular disease, Atherosclerosis, Elderly

* **Corresponding Author:** Fakhrzadeh H (MD), E-mail: fakhrzad@tums.ac.ir

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