



# Chronic ischemic heart disease

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The average annual mortality for patients with chronic ischemic heart disease and stable angina is 2–3% – that is, twice that of age-matched controls. Certain patients, however, are at much higher risk. This high-risk subgroup includes patients with easily inducible ischemia, and patients who have suffered previous myocardial infarction.

After many years in which cardiologists mostly focused on acute ischemic syndromes, today more attention is being paid to chronic ischemic heart disease. Chronic ischemic heart disease is increasingly recognized as a very dynamic condition. In addition to overt acute myocardial infarction, which can precipitate at any time in patients with “stable” angina pectoris, clinical and subclinical ischemic events may accumulate and, in the long term, generate diverse states of chronic cardiac dysfunction. Repetitive episodes of ischemia, whether stress induced or spontaneous, symptomatic or silent, may progressively impair myocardial contractile performance through myocardial stunning or hibernation, and eventually lead to left ventricular remodeling and heart failure.

Evidence is accumulating that genetic variability and altered gene and protein expression contribute significantly to clinical outcomes in ischemic heart disease. Data from “omics” studies show potential to help in the development of novel, more individualized, therapeutic approaches in coronary artery disease.

New imaging techniques may help in diagnosing heart failure, its causes, course, and prognosis. Positron emission tomography, by enabling the assessment of myocardial perfusion and metabolism, and magnetic resonance imaging, allowing the evaluation of myocardial necrosis and microvascular damage, can predict contractile recovery after revascularization procedures.

Papers in this issue of *Heart and Metabolism* contribute to a better appreciation of the complexity of chronic ischemic syndromes and a better understanding of the prognostic impact of current therapies, stimulating the search for innovative approaches to the evaluation and treatment of this common disorder.