

Myocardial perfusion scintigraphy in asymptomatic diabetic patients

Cintilografia de perfusão miocárdica em diabéticos assintomáticos

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Cardiovascular disease represents the main cause of mortality in the world. The capability of identifying, among asymptomatic individuals, the subgroup at higher risk for developing cardiovascular events, is a fundamental step in any strategy intended to reduce the rates of cardiovascular events⁽¹⁾.

The present issue of *Radiologia Brasileira* includes a study developed by Oki et al.⁽²⁾ who utilized myocardial perfusion scintigraphy for detecting silent ischemia in asymptomatic diabetic patients. In such study, the authors could demonstrate that one in every five asymptomatic diabetic patients may present silent ischemia associated with age above 60 years, peripheral neuropathy, nephropathy, retinopathy and positive stress electrocardiography test for ischemia. Perhaps the diagnosis of such silent ischemic state can be of help in the adoption of a more effective clinical approach, reducing the mortality and morbidity in this group of patients.

Over the past years, advances in hardware and softwares for nuclear medicine, and magnetic resonance imaging, and computed tomography have allowed the acquisition of images with greater diagnostic capability for screening and selection of asymptomatic patients at high risk for cardiovascular event. The objective is to diagnose and avoid a clinical event with unfavorable outcome, as highlighted by the study of Oki et al.⁽²⁾. This is necessary for the development of therapeutic options, improving life expectancy and quality of life for that population.

Currently, large clinical trials are currently available, bringing to our daily practice better concepts on the selection of groups at higher risk, thus allowing a possible intervention in the natural history of the disease.

The publicizing and knowledge of the EDIC^(3,4) (The Epidemiology of Diabetes Interventions and Complications study) and MESA^(5,6) (The Multi-Ethnic Study of Atherosclerosis) are of paramount relevance. The latter, with a design similar to the Framingham Heart Study, added of the advanced imaging methods, have already demonstrated that the utilization of imaging methods can improve clinical selection⁽⁷⁾. The first study ap-

proaches a population with type I diabetes, while the second approaches the type II diabetes population. It is already known that not only ischemia can silently occur in such populations, but also myocardial scar with small infarctions and fibrosis are present. The study published by Turkbey et al. has demonstrated, using magnetic resonance imaging, the presence of myocardial scar (fibrosis) in 4.3% of the individuals in a population with type I diabetes and with normal renal function⁽⁴⁾. This study draws attention to the fact that something besides ischemia may be already occurring in this population without any specific treatment.

In such a context, a scientific discussion on these themes is necessary, since nuclear medicine is already inserted into the current cardiology, and techniques such as cardiac magnetic resonance imaging at rest and under pharmacological stress, coronary calcium score test and coronary CT angiography, will be increasingly supporting the assisting physicians and playing a relevant role as complementary tools in the stratification of the risk of asymptomatic patients, whether diabetic or not.

Additionally, I also agree with the authors on their assertion that prospective studies including only high-risk asymptomatic diabetic patients are necessary to find out whether offering a more aggressive therapy for this specific subgroup will be beneficial.

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