

REVIEW ARTICLES

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Myocardial revascularization in patients with coronary artery disease and diabetes mellitus

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Abstract

Background: Diabetes mellitus (DM) is one of the most crucial risk factors for morbidity and mortality from coronary heart disease (CAD) in the contemporary world. The prevalence and rapid progression of atherosclerotic lesions leading to worse survival is a defining feature of the course of CAD in patients with DM. Clinical manifestations of CAD often call for revascularization in patients with DM. The contemporary data regarding efficacy of the coronary artery bypass grafting (CABG) and percutaneous coronary intervention (PCI) in patients with CAD and concomitant DM are summarized in the review.

Conclusions: Worse survival prognosis in case of CAD with concomitant DM is associated with systemic atherosclerosis, presence of a number of concomitant risk factors, as well as masked clinical manifestations of ischemia and myocardial infarction common for the patients with DM. The combination of CAD and DM once again proves the benefit of the long-term use of drugs for the secondary prevention of cardiovascular events. From the standpoint of evidence-based medicine the optimal method of revascularization in CAD patients with multivessel coronary artery disease and concomitant DM is CABG surgery. In FREEDOM study surgical myocardial revascularization reduced the number of endpoints compared to PCI. In the case of PCI it is advisable that eluting stents reducing the likelihood of restenosis and the need for repeated revascularization be used.

Key words: diabetes mellitus, coronary artery disease, coronary artery bypass grafting.