References


eComment: Increase the surgical options

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It is important to have a clear orientation in these patients with akinetic area [1]. What to do is not easy due to the heterogeneity. The initial surgical stem cells application shows promising results in these patients. I think in any operation of this type (also in future trials) we need to consider the complementary direct surgical injection of stem cells during the intervention.

Reference


eComment: Insights in the reshaping of the ischemic ventricle

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We read with interest the review by Subramanian and co-workers [1]. Ischemic cardiomyopathy is a disease of the myocardium originating from a long standing disease in the coronary tree. This statement, such as the progression of the disease in its evolution, and the numerous factors influencing the dilatation of the left ventricle and the evolution to congestive heart failure (CHF) should be reconsidered. Myocardial infarction (MI) is ‘only’ an acute clinical manifestation of coronary disease, even if with long-term consequences and hemodynamic changes. Patients with coronary disease, suffering from acute MI often have a scenario of multivessel disease, often associated with other pathologies like diabetes, and hypertension with diastolic dysfunction. How will multivessel disease influence the hemodynamic pattern of the left ventricle, and will it participate in changes during the post MI remodelling? In the same ventricle there could be coexistence of areas of akinisia and diskinesia, and more important areas of viable ischemic muscle in its stunned or hibernating status. How would those areas react to an acute event? Is the reaction of viable but ischemic areas the same as normally perfused areas? The post MI hemodynamic changes, reflected on increased LV volumes and diameters, will be due not only at the acute necrotic event and its extension, but will be influenced by the original conditions of the ventricle, the perfusion of the different segmental portions, the coexistence of mitral valve regurgitation. The increased volumetric and pressure parameters and the presence of mitral regurgitation will reflect on advanced NYHA class symptoms, CHF, and reduced long-term survival. The long-term follow-up of those patients will be therefore influenced by many factors [2, 3], to be taken in consideration before the treatment.

In our practice, we believe in time of surgery those patients would benefit from a treatment to reduce the diameters and volumes of the left ventricle. As shown in the literature revascularization on its own will have reduced results in dilated hearts [4]. A complete revascularization of the viable areas

one SVR, although most only perform low numbers. In this database over 2 years from 2002, there were 731 procedures. The mortality was 9.4% and 33% of patients suffered a major complication or death, cautioning that in the ‘real-world’ results may not be as good as those from high volume tertiary referral centres. Patient selection may be a reason for these differences. The STICH trial has now completed the recruitment of 2136 patients into a randomised trial of medical therapy vs. CABG vs. CABG and SVR surgery. With first results expected in 2009, this study will be a landmark in providing the evidence base for the selection of patients for surgical ventricular restoration surgery.

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of the ventricle should be researched with preoperative use of vitality studies. Those last together with preoperative and intra-operative echocardiographic study will be of help in the choice of the segmental areas to treat, (which one to exclude, and which one to treat by revascularization). Concomitant treatment of functional ischemic mitral regurgitation should be performed at the time of surgery, both on the valvular apparatus (chordae and papillary muscles) and on the geometry of the ventricle to reduce the tenting effect.

We see that different conditions will influence the preoperative status such as the results in the outcome of those patients. The results of the only hospital mortality should be reconsidered in light of the long-term survival in those patients. Nevertheless, results obtained in centres not really dedicated to this type of procedure could mislead on the effectiveness and on the concept being at the base of the surgical ventricular restoration: ‘The volume reduction, and the reshaping toward a more physiological status of the left ventricle’.

References


