one SVR, although most only perform low numbers. In this
database over 2 years from 2002, there were 731 proce-
dures. 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 random-
ised 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.

References

medicine in cardiothoracic surgery: best BETS. Interact CardioVasc

EH. Surgical anterior ventricular endocardial restoration (SAVER)
in the dilated remodelled ventricle after anterior myocardial
infarction. RESTORE group. Reconstructive endoventricular surgery,
returning torsion original radius elliptical shape to the LV. J Am Coll
Cardiol 2001;37:1199–1209.

M, Menicanti L, Almeida de Oliveira S, Beyersdorf F, Kron IL, Sama H,
Kouchokus NT, Moore W, McCarthy PM, Oz MC, Fontan F, Scott ML,
Accola KA, RESTORE group. Surgical ventricular restoration in the
treatment of congestive heart failure due to post-infarction ventricular

of endoventricular patch plasty in large postinfarction akinetic scar and
severe left ventricular dysfunction: comparison with a series of large

IL. Coronary artery bypass with ventricular restoration is superior to
coronary artery bypass alone in patients with ischemic cardiomyopathy.

AN, Franchini KG. Left ventricular reconstruction brings benefit for patients

reconstruction benefits patients with dilated ischemic cardiomyopathy.

ular reconstruction: early and late results. J Thorac Cardiovasc Surg

Reinert GA, Franchini KG. Left ventricular reconstruction benefits patients
with ischemic cardiomyopathy and non-viable myocardium. Eur J

[10] Cooper GS, Bunton RW, Birjiniuk V, DiSesa VJ, Fallan AM, Collins JJ Jr,
Cohn LH. Relative risks of left ventricular aneurysmectomy in patients
with akinetic scars versus true dyskinetic aneurysms. Circulation
1990;82:IV248–IV256.

Loop RD. Prediction of improvement in left ventricular function after
ventricular aneurysmectomy using Fourier phase and amplitude analysis
1312.

remodeling in the year after first anterior myocardial infarction: a
quantitative analysis of contractile segment lengths and ventricular

[13] Velazquez EJ, Lee KL, O’Connor CM, Oh JK, Bonow RO, Pohost GM,
Feldman AM, Mark DB, Panza JA, Sopko G, Rouleau JL, Jones RH, STICH
Investigators. The rationale and design of the surgical treatment for
Ischemic Heart Failure (STICH) trial. J Thorac Cardiovasc Surg 2007;
134:1540–1547.

left ventricular aneurysm: results obtained with a modified linear

Peterson ED. Contemporary performance of surgical ventricular resto-
ration procedures: data from the Society of Thoracic Surgeons’ National
Cardiac Database. Am Heart J 2006;152:494–499.

de Vincenzi C, Brandovic J, Di Donato M. Surgical therapy for ischemic
heart failure: single centre experience with surgical anterior ventricular

eComment: Increase the surgical options

Author: Federico Benetti, Benetti Foundation, Alem 1846, Rosario,
Argentina
doi:10.1510/icvts.2008.182790A

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

ventricular restoration in patients with ischemic cardiomyopathy and
akinetic but non-aneurysmal segments in the left ventricle? Interact

eComment: Insights in the reshaping of the ischemic ventricle

Authors: Salvatore Lentini, Cardiac Surgery Unit, Policlinic Hospital,
University of Messina, Messina 98100, Italy; Paola Murè, Fabrizio Tancredi,
Roberto Gaeta

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 hemody-
amic 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 akinasia 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 influ-
enced 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

Downloaded from https://academic.oup.com/icvts/article-abstract/7/4/707/760658 by guest on 26 January 2019
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


