Ischemic Severe Mitral Regurgitation With Pulmonary Hypertension Post Coronary Artery Bypass Surgery: Therapeutic Challenge?
Ouzan, E; Beeri, R; Hellman, Y; Lotan, C
Heart Institute, Jerusalem, Israel

Background:
The development of severe ischemic mitral regurgitation after bypass surgery is not uncommon. This situation poses to the clinician a difficult therapeutic challenge.

Aim:
To study outcome of patients who developed severe ischemic mitral regurgitation (IMR) complicated with pulmonary hypertension (HTP) a long time after bypass surgery.

Methods:
From 2005 to 2009, 34 patients who have undergone bypass surgery developed ischemic mitral regurgitation without no aortic disease, no mitral stenosis, no hypertrophy cardiomyopathy and no previous valve surgery or transplantation. All these patients were symptomatic with at least one episode of cardiac failure. Twelve patients had chronic renal failure. Three patients underwent a surgical revascularization completed for only one patient by mitral valve repair. Five patients underwent one or several stent implantation. One patient whose stent restenosed after a short period of time was revascularized surgically. One patient suffered from occlusion of a stent to diagonal artery and was treated medically.

Results:
All patients after complete revascularization are feeling well and returned to unlimited activity. The patients after stent implantation returned to current life with some limitation, while majority of patients under medical treatment only, deteriorated. Eleven patients died from refractory cardiac failure precipitated by infection. The fatal event occurred most often in the first year after the diagnosis of severe IMR with severe HTP.

Conclusion:
On top of an optimal medical treatment, an aggressive approach with coronaryography and angioplasty should be recommanded. The optimal surgical revascularization seems to give the best results. However both clinicians and surgeons are reluctant because of the inherent risk of a redux and complex procedure. The development of percutaneous mitral valve repair could represent a great hope for these patients whose prognosis seems so bad.