

"Ring Only" for the Repair of Barlow Syndrome of the Mitral Valve

Netser, Adi¹; Hay, Ilan²; Sternik, Leonid¹; Spiegelstien, Danny¹; Raanani, Ehud¹

¹Sheba Medical Center, Department of Cardiac Surgery, Tel Hashomer, Israel; ²Sheba Medical Center, Department of Cardiology, Tel Hashomer, Israel

Objective: Several surgical methods have been described for the repair for severe mitral regurgitation in Barlow syndrome. All techniques are complex and the reported mid and long term results are suboptimal. We identified a simple repair technique for some of the patients with mitral valve Barlow syndrome.

Patients and methods: Since October 2005 we identified 15 patients with symmetrical multi-segment bi-leaflet mitral valve prolapse and severe MR. All those patients underwent only implantation of large semi-rigid, Physio ring (34-40mm).

Results: There were no early or late deaths. Post operative Echo showed No MR in 12 (80%) patients and mild MR in 2 (13.3%) patients. Mean coaptation length was 13mm ± 2mm. At late follow up of 16months±16 months there were 6 patients with No MR and 1 with mild MR (other patients have not had sufficient time for follow up). One patient, which already had severe calcifications of the mitral annulus on the initial surgery, required re-operation due to recurrent severe MR one year after surgery.

Conclusions: In patients with symmetrical multi-segment bi-leaflet prolapse, "ring only" technique provides excellent mid-term echocardiographic results. In patients with significant annular calcifications, other surgical technique should be used.