Background: Favorable LV remodeling occurred after successful PR, however improvements were less robust compared to SR at 4 years. LA volumes improved significantly after successful SR, but only after PR when residual MR was ≤1+. Further study should inform whether the degree of reverse remodeling impacts long-term clinical outcomes and MitraClip durability.

Conclusions: this truly independent and contemporary registry of MitraClip implantation shows that the technique is effective and is associated with low complication rate.

TCT-87
Targeting systolic anterior motion and left ventricular outflow tract obstruction in hypertrophic obstructed cardiomyopathy with a MitraClip
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Background: Obstructive hypertrophic cardiomyopathy (HOCM) with left ventricular outflow tract obstruction frequently involves a systolic anterior motion (SAM) of the anterior mitral leaflet. We hypothesized, that SAM could be a new target for MitraClip therapy.

Methods: Four patients with HOCM were chosen for MitraClip therapy, due to significant SAM with subsequent mitral regurgitation. Invasive hemodynamic studies (right heart catheterization, simultaneous transaortic pressure recording, administration of nitroglycerin) before and after MitraClip implantation in addition to 6 weeks follow-up were performed.

Results: MitraClip implantation was successfully performed with significant reduction of mitral regurgitation and SAM in all patients. Basal peak gradients (before Clip: 56±27 mmHg; after clip: 10±6 mmHg) as well as provoked pressure gradients (before clip: 134±23 mmHg; after clip: 21±8 mmHg) were significantly reduced after MitraClip. Right heart catheterization data did not reveal major changes. At 6-weeks follow-up, all patients presented in a persistent improved clinical state (NYHA class I-II) with insignificant residual MR and continuously reduced LVOT gradients.

Conclusions: This is the first catheter-based study targeting primarily a SAM in HOCM to reduce LVOT obstruction. The results prove the concept, that SAM is more than an epiphenomenon in HOCM. Thus, SAM-induced obstruction might be a valuable target for the MitraClip.