Background: Acute hemodynamic changes from the MitraClip (Abbott Vascular, Santa Clara, CA) procedure have been shown in mitral regurgitation (MR) for mitral valve therapy, but have not been elucidated in functional MR. Also, there is a misconception that reducing functional MR may lead to a detrimental change in acute hemodynamics.

Methods: A retrospective review was performed on 85 consecutive patients with functional MR (mean age 76±11 years, 30 (35%) females) who had full set of hemodynamics prior to and after the MitraClip procedure. 57 (67%) patients were included in the high-risk group (mean STS score 14.9±7.4%) with 78 (92%) in NYHA functional class III or IV and 71 (99%) with MR grade 4+. There were 34 (40%) patients with left ventricular ejection fraction (LVEF) ≤ 35% (mean 26±6%); overall mean left ventricular end systolic diameter of 40±10mm.

Results: There were significant improvements in the cardiac index (CI, mean pre CI of 1.9±0.47 L/min/m² vs. post CI 2.4±0.61 L/min/m², p<0.001) and mean left atrial pressures (MLAP: mean pre MLAP of 20±7.67 mmHg vs. post MLAP 17.2±5.7 mmHg, p<0.001). Improvements in CI and MLAP was observed in 75/85 (88%) and 50/74 (68%) patients respectively. At a mean follow-up of 13.2±9.7months, 76/85 (89%) was an NYHA functional class I or II (from 78/85 (92%) in NYHA class III or IV at baseline, p<0.001) and 7/85 (8%) had MR grade ≤ 2+ (from 85/85 (100%) in MR grade 3+ or 4+ at baseline, p<0.001).

Conclusions: In patients with functional MR, the MitraClip procedure resulted in a significant change in CI and MLAP.

TCT-797

Transcatheter Mitral Valve-in-Valve / Valve-in-Ring Implantations For Degenerative Post Surgical Valves: Results From The Global Valve-in-Valve Registry

Danny Dorm1, John Webb2, Ulrich Schäfer3, Hendrik Treede4, Sabine Bleiziffer5, Hendrik Treede4, Sabine Bleiziffer5,

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