Abstract: **P706**

**Effects of surgical septal myectomy on left ventricular diastolic LV function in patients with hypertrophic obstructive cardiomyopathy.**

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**Introduction and Purpose**
Surgical left ventricular (LV) septal myectomy in patients with obstructive hypertrophic cardiomyopathy has been shown to reduce left ventricular outflow tract (LVOT) gradient and improve symptoms. We investigated changes in strain analysis, LA volume and LV diastolic function in patients with HOCM after surgical septal myectomy.

**Methods**
We enrolled consecutive 28 patients (age 66.7 ± 12.1 years, 46% Female), who underwent surgical LV septal myectomy for HOCM from 2012 to 2018.

We evaluated LV dimension, LVOTG, LV in flow pattern (E wave, A wave, Dct), e’ (septal and lateral), LA volume, mitral regurgitation (MR), systolic anterior motion of mitral valve (SAM) and Global longitudinal strain. These parameters were evaluated at baseline and after LV myectomy at medium term (at least 6 months after surgery).

**Results**
They are followed for a mean of 2.7± 2.0 years after surgery. Eight patients underwent concomitant procedure; mitral valve repair and annuloplasty in 3 patients (11%), Maze surgery in 1 patient, LV aneurysmectomy in 2 patients and aortic valve replacement in 3 patients (11%). Patients with concomitant procedure were excluded from LV function analysis. Postoperative LVOTG were controlled in 10mmHg or less. Global longitudinal strain (GLS) improved but no significant change. Otherwise LA volume index decreased (from 49.1 ± 17.6 to 37.9 ± 16.2 ml/m2, p = 0.01) and LV diastolic function improved with an increase in lateral e’ velocity (from 5.2 ± 2.9 to 9.8 ± 3.1 cm/sec, p = 0.001) and improved E/e’ (from 19.8 ± 6.7 to 10.2 ± 5.8, p <0.05). Symptoms of dyspnea, chest oppression and heart failure improved with reduction in the New York Heart Association functional class.

**Conclusion**
Excellent relief of LVOT obstruction in HOCM by surgical LV septal myectomy results in decreased LA volume and LV diastolic function with improved symptoms.