**GENDER DIFFERENCES IN THE RELATIONSHIP BETWEEN LEFT VENTRICULAR GEOMETRY AND GLOBAL AFTERLOAD IN DEGENERATIVE AORTIC STENOSIS**

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**Abstract**

Differences in LV geometry and LV Global Afterload (GAL) in men and women with isolated degenerative aortic stenosis were previously described. LV geometry is related to LV Global Afterload (GAL) in patients with aortic stenosis, with increased GAL related to increased LV mass index (LVMI) and lower myocardial performance index (MPI). The findings were inconsistent and the studies focused on different subgroups.

**Aim**

To compare associations of LV geometry with global LV afterload according to gender in patients with isolated degenerative aortic stenosis.

**Background**

Differences in LV geometry and LV GAL in men and women with isolated degenerative aortic stenosis were previously described. LV geometry is related to LV GAL in patients with aortic stenosis, with increased GAL related to increased LV mass index (LVMI) and lower myocardial performance index (MPI). The findings were inconsistent and the studies focused on different subgroups.

**Patients**

Retrospective analysis of medical records of 140 consecutive subjects with isolated AS hospitalized in a tertiary care center. Analysis included 112 men (66 women) 156 ± 21 years (± SD). Mean GAL was higher in men than women (156 ± 21 vs. 144 ± 20, p=0.02). LV mass index (LVMI) was higher in men than women (52 ± 10 vs. 46 ± 9, p=0.02). LV ejection fraction (LVEF) was higher in men than women (49 ± 4 vs. 44 ± 3, p=0.01). LV myocardial performance index (MPI) was higher in men than women (9 ± 9 vs. 7 ± 6, p=0.03).

**Results – echocardiographic data**

**Results – clinical characteristics**

Gender differences in LV adaptation to chronic aortic valve stenosis may contribute to different LV systolic dysfunction in men with isolated AS.

**References**