

TCT-132**Simultaneous Interventional Treatment of Patients With Hypertrophic Obstructive Cardiomyopathy and Coexisting Coronary Artery Disease**

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BACKGROUND Hypertrophic obstructive cardiomyopathy (HOCM) is associated with coronary artery disease (CAD) in 15% to 21.6% of patients. It worsens their survival prognosis and impairs the results of both surgical and interventional treatment. However, controversy still exists regarding the optimal management strategy.

METHODS From 2009 to 2018 in our center, 129 patients with HOCM were treated interventionaly. A total of 115 of them (Group 1) underwent primary alcohol septal ablation (ASA), and in 14 patients (Group 2), ASA was performed simultaneously with percutaneous coronary intervention (PCI) for CAD. In Group 1, the mean age of patients was 47.5 ± 15.3 years, and in Group 2, the mean age was 56.9 ± 7.4 years. All patients had right ventricle pacing lead with pacemaker backup and myocardial contrast echo (MCE) before the procedure. In 3 cases (2.3%), the procedure was aborted by the MCE data.

RESULTS Mean pressure gradient (PG) on left ventricular outflow tract (LVOT) decreased from 92.1 ± 24.91 mm Hg to 34.7 ± 9.8 mm Hg ($p < 0.01$) in Group 1 and from 88.1 ± 20.8 mm Hg to 31.9 ± 12.3 mm Hg ($p < 0.05$) in Group 2. The grade of MR reduced from at least moderate to mild or even trivial in both groups. The procedure-related mortality was 1.7% (2 patients) in Group 1 and 0% in Group 2. Mean follow-up for all patients was 71 ± 4.7 months. Long-term mortality in Group 1 was 1.8% vs. zero mortality in Group 2. A total of 86 (76.1%) patients in Group 1 versus 12 (85.7%) patients in Group 2 had PG reduction (to ≤ 30 mm Hg)—regarded as a good result of the procedure. A total of 16 (14.1%) patients in Group 1 and 2 (14.3%) patients in Group 2 had PG > 30 mm Hg, but significant improvement in symptoms. Nine (8%) patients needed redo procedure due to residual LVOT obstruction, which was effective. A total of 9 (8%) patients in Group 1 and 2 (14%) patients in Group 2 had complete AV block and required permanent pacemaker. Mean interventricular wall thickness decreased from 2.8 ± 0.5 cm to 1.9 ± 0.3 cm in Group 1 and from 2.7 ± 0.4 cm to 2.0 ± 0.3 cm in Group 2. Mean New York Heart Association functional class was reduced from 2.9 to 1.1 in both groups.

CONCLUSION Interventional treatment of patients with HOCM and coexisting CAD with simultaneous ASA and PCI is an effective and safe strategy. The duration of the procedure can be reduced and general results can be improved with accumulation of experience.

CATEGORIES STRUCTURAL: Alcohol Septal Ablation/HOCM