permanent pacemaker. Of them1patient had ASA after Morrow procedure in anamnesis, 3 pts had initial changes on ECG. In 1 case we had alcohol leakage from septal branch to LAD – aspiration, absence of MACE. Also we had 1 case of ventricular fibrillation on the 10-th day after procedure. Mean interventricular wall thickness decreased from 2,5  $\pm$  0,3cm to 1,9  $\pm$  0,1cm. MR decreased from at least moderate to mild or complete disappearance. NYHA class reduced from 2,9 to 1,1.

**CONCLUSIONS** ASA is effective and safe method of HOCM treatment. The reduction of the duration of the procedure, decreasing of the number of the complications and general improvement of the results of interventional HOCM treatment are possible with accumulation of the experience.

CATEGORIES STRUCTURAL: Alcohol Septal Ablation/HOCM
KEYWORDS Ablation, alcohol septal, Long-term follow up

#### TCT-747

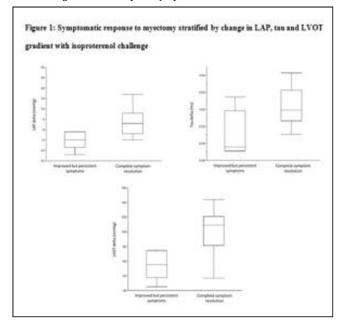
### Utility of isoproterenol challenge in predicting symptomatic response to myectomy in hypertrophic cardiomyopathy with occult obstruction

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**BACKGROUND** Septal myectomy is the gold standard for medically-refractory patients with hypertrophic obstructive cardiomyopathy (HCM). There is a subset of patients who have severe exertional symptoms without a resting or provocable left ventricular outflow tract (LVOT) gradient on noninvasive testing. These patients may demonstrate obstruction on hemodynamic catheterization with isoproterenol challenge but is has remained unclear how they respond to septal reduction therapy. We aimed to assess the ability of isoproterenol challenge to predict symptom resolution with myectomy in a selected HCM population.

**METHODS** 18 symptomatic HCM patients (NYHA class III or IV) with labile obstruction on isoproterenol challenge underwent surgical myectomy between February 2003 and April 2009. Patients were reassessed for symptom resolution after a median of 4 (IQR 3-7) years.

**RESULTS** Post-myectomy, 13 patients (72.2%) had complete symptom resolution, while 5 (27.8%) had improved but persistent symptoms. Patients with complete symptom resolution had a greater increase in left atrial pressure (LAP) and tau with isoproterenol [3 (IQR -2-8) mmHg vs. -5 (IQR -8.5-1) mmHg; p=0.01] and [-0.7 (IQR -13-22) ms vs. -44 (IQR -48-0.2) ms; p=0.03] (Figure 1). The mean change in LVOT gradient with peak isoproterenol was significantly greater among patients with complete symptom resolution compared to patients with improved but persistent symptoms [(104 (IQR 66-123) mmHg vs. 55 (IQR 38-74) mmHg; p=0.01). All patients with increase in LAP with isoproterenol and LVOT gradient >100 mmHg achieved complete symptom resolution.



**CONCLUSIONS** Patients with residual symptoms post-myectomy had less increase in LAP and tau with isoproterenol indicating a "fixed" component to diastolic filling, as opposed to patients with symptom resolution whose response was indicative of elevation in filling pressures secondary to dynamic obstruction.

CATEGORIES STRUCTURAL: Alcohol Septal Ablation/HOCM
KEYWORDS Hemodynamics, Hypertrophic obstructive cardiomyopathy, Myectomy

#### **TCT-748**

## Outcomes among the Elderly in Alcohol Septal Ablation for Symptomatic Hypertrophic Obstructive Cardiomyopathy

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**BACKGROUND** Current practice guidelines suggest that ASA may be the treatment of choice for elderly patients with medically refractory symptomatic HOCM because of the risks associated with cardiac surgery in this patient population. We sought to determine the outcomes and complications in elderly patients who undergo ASA.

**METHODS** 220 alcohol septal ablations were performed on 198 patients age 65 years or older (age 73  $\pm$ 5y, 68% F) over a 15 year period. Subgroup analyses were performed for patients  $\geq$  75 years of age (n=73, 80% F) and for patients age 65-74 (n=125, 61% F).

**RESULTS** Of 220 ASA procedures performed, the primary endpoint of in-hospital death occurred in four patients (1.8%). Among patients  $\geq$  75 years of age (79 procedures) three patients died (4%) compared to one death (0.7%) among patients age 65-74 years of age (141 ASA procedures). 26 (11.8%) were repeat ablations. Complete heart block (CHB) requiring permanent pacemaker occurred in 21 patients (9.5%). For patients age  $\geq$  75 years the rate CHB requiring pacemaker implantation was 11.3%. Bleeding or access site complications were reported in eight patients (4.1%) among the entire cohort. Bleeding or access site complications occurred in five patients (3.5%) who were  $\geq$  75 years of age at the time of procedure.

**CONCLUSIONS** This study shows the safety of ASA in elderly patients. Compared to the entire cohort of patients all ages undergoing ASA, the elderly did not have a statistically significant difference in complete heart block requiring pacemaker implantation, bleeding/access site complications, or procedural mortality. Although mortality rate of the elderly cohort was not increased over historic controls, patients >75 years of age had statistically significant higher mortality than patients 65-74 years of age.

	65-75y	>75y	Total	P-Value
Number of patients (procedures)	125 (141)	73 (79)	198 (220)	-
Deaths: number (%)	1 (0.7%)	3(4%)	4(1.8%)	0.0002
CHB: number(%)	12 (5.4%)	9 (11.3%)	21 (9.5%)	0.39
Bleeding/access complication	4 (5.0%)	5 (3.5%)	9(4.1%)	0.21

CATEGORIES STRUCTURAL: Alcohol Septal Ablation/HOCM
KEYWORDS Ablation, alcohol septal, Hypertrophic cardiomyopathy

### TCT-749

# The Impact of Race and Gender on Procedural Outcomes After Alcohol Septal Ablation for Symptomatic Hypertrophic Obstructive Cardiomyopathy

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**BACKGROUND** Alcohol septal ablation (ASA) is an established treatment for symptomatic hypertrophic obstructive cardiomyopathy (HOCM). The impact of race and gender on the results of ASA in patients with HOCM has not been reported in the literature.

**METHODS** Six hundred and forty-five patients with symptomatic HOCM despite optimal medical therapy underwent ASA at a single center over a fifteen-year time period (1999 to 2014). All patients were grouped according