

permanent pacemaker. Of them patient 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 $2,5 \pm 0,3\text{cm}$ to $1,9 \pm 0,1\text{cm}$. 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 provokable left ventricular outflow tract (LVOT) gradient on noninvasive testing. These patients may demonstrate obstruction on hemodynamic catheterization with isoproterenol challenge but it 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

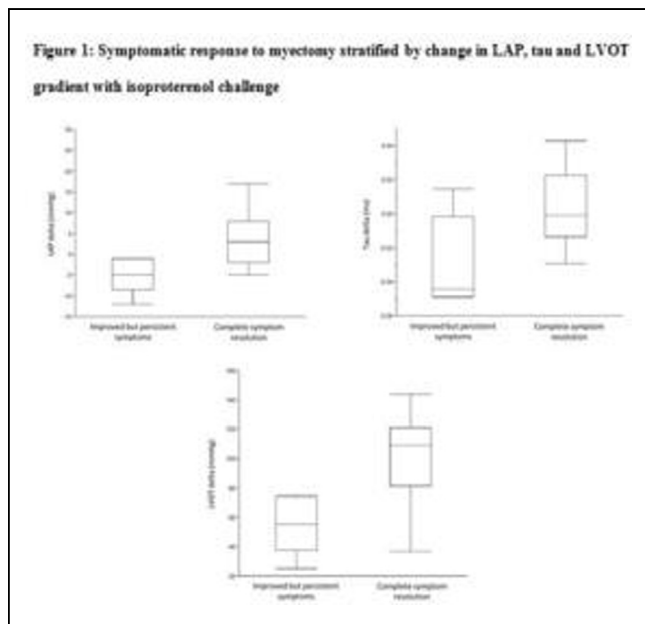
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BACKGROUND Current practice guidelines suggest that ASA may be the treatment of choice for elderly patients with medically refractory symptomatic HOCM because of the risks associated with cardiac surgery in this patient population. We sought to determine 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 $73 \pm 5\text{y}$, 68% F) over a 15 year period. Subgroup analyses were performed for patients ≥ 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 ≥ 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 ≥ 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 ≥ 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

to self-identified race (Caucasian or African American) and gender. Data was retrospectively gathered and prospectively analyzed for procedural success (reduction in LVOT gradient) and procedural complications.

RESULTS There were 298 males (53±13y) and 347 females (60±15.5y). The male cohort received a higher dose of alcohol; however, there were no other differences in procedural success, mortality, or need for permanent pacemaker implantation. (Table 1) There were 555 Caucasian (57±15y) and 59 African American (59±15y) patients in the study. African American patients had more septal arteries injected with more alcohol, a higher post ablation creatinine kinase level, and a greater reduction in peak LVOT gradient compared to the Caucasian cohort. There was no difference in procedural mortality or the need for permanent pacemaker. (Table 2)

	Male (STD; Ct; or number of incident)	Female (STD; Ct; or number of incident)	P value for gender	Caucasian (STD; Ct; or number of incident)	African American (STD; Ct; or number of incident)	P value for race
N	298	347	NA	555	59	NA
Age	53 (14; +/- 1.5)	60 (15.5; +/- 1.6)	0.0000000056	57 (15; +/- 1.25)	59 (14; +/- 4)	0.3
Reduction in Gradient	87 (51; +/- 6.14)	84 (54.8; +/- 6.1)	0.85	84 (50; +/- 4.5)	99 (55; +/- 16)	0.05
Number of Septal Arteries Injected	1.16 (0.4; +/- 0.05)	1.16 (0.45; +/- 0.05)	0.96	1.15 (0.4; +/- 0.03)	1.26 (0.5; +/- 0.13)	0.05
Amount of EthD Injected	2.27 (0.7; +/- 0.08)	2.14 (0.76; +/- 0.08)	0.03	2.2 (0.74; +/- 0.06)	2.34 (0.7; +/- 0.2)	0.09
Peak Creatinine Kinase	1194 (701; +/- 81)	1082 (790; +/- 85)	0.06	1099 (765; +/- 65)	1426 (646; +/- 170)	0.001
Rate of Heart Block Requiring PPM	6% (18 of 298)	6.9% (24 of 347)	0.65	6.3% (35 of 555)	8.5% (5 of 59)	0.52
Procedural Death	1% (2 of 298)	1.2% (4 of 347)	0.52	0.9% (5 of 555)	1.7% (1 of 59)	0.55

CONCLUSIONS There was no significant effect of gender on the outcomes of alcohol septal ablation. Despite the need for more septals injected and a higher alcohol dose (larger infarct size) in African American patients, the clinical outcomes were similar to the Caucasian cohort. The higher alcohol dose and infarct size likely reflects the greater septal hypertrophy typically seen in African American patients with HOCM.

CATEGORIES STRUCTURAL: Alcohol Septal Ablation/HOCM

KEYWORDS Ablation, alcohol septal, Hypertrophic obstructive cardiomyopathy, Racial disparities

TCT-750
Abstract Withdrawn

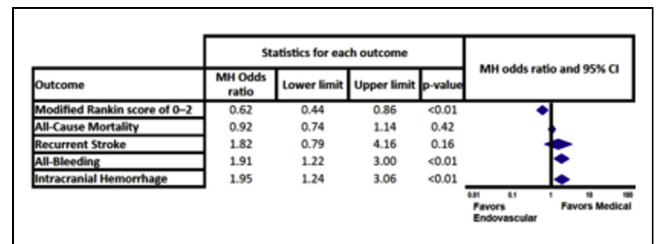
TCT-751
Abstract Withdrawn

BACKGROUND Several randomized controlled trials (RCTs) have shown inconsistent results in regards to outcomes in patients with acute ischemic stroke (AIS) undergoing endovascular therapy (ET) versus standard medical treatment (MT). Thus we sought to evaluate the effectiveness and safety of ET compared to MT in patients with AIS utilizing data from all available RCTs.

METHODS We conducted electronic searches of RCT. The primary efficacy endpoints were modified Rankin scale 0 to 2, recurrent stroke, and all-cause mortality. Safety endpoints included intracranial hemorrhage (ICH) and all-bleeding events. Odds ratios (OR) and 95% confidence intervals (CI) computed using the Mantel-Haenszel method. Random-effect model was used. Sensitivity analysis and bias quantification were also assessed.

RESULTS Ten RCTs were included, with a total of 2,716 patients. There was a significant difference favoring ET compared to MT for modified Rankin scale score 0 to 2 (OR: 0.62; 95% CI: 0.44 to 0.86; p< 0.01). We found no difference between ET vs. MT for all-cause mortality (OR: 0.92; 95% CI: 0.74 to 1.14; p= 0.42) and recurrent stroke (OR: 1.82; 95% CI: 0.79 to 4.16; p= 0.16). For safety outcomes, there was an increased risk of all-bleeding events (OR: 1.91; 95% CI: 1.22 to 3.00; p< 0.01) and ICH (OR: 1.95; 95% CI: 1.24 to 3.06; p< 0.01) following ET. Sensitivity analysis of one study removal showed that exclusion of the PROACT II study from the analysis for all-bleeding and ICH outcomes changed the final effect to a non-significant difference between both approaches. No evidence of publication bias was observed. The number needed to treat for a Rankin score 0 to 2 is 8; the number needed to harm for all-bleeding and ICH is 8 and 10 respectively.

CONCLUSIONS The results of this meta-analysis indicate that in patients with AIS, ET is superior to standard MT for disability-free survival, with an increased risk of bleeding and ICH.



CATEGORIES ENDOVASCULAR: Stroke and Stroke Prevention

KEYWORDS Endovascular therapy, Meta-analysis, Stroke, acute ischemic

TCT-753
Peri-interventional Complication Rates In Patients Undergoing Carotid Artery Stenting Depending On The Side Of The Stenosis Treated

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BACKGROUND We retrospectively analyzed data from our center to quantify complication rates in patients undergoing carotid artery stenting (CAS). Thereby, we sought to evaluate a possible association between the vessel (left vs. right) treated and the respective complication rate.

METHODS In a retrospective analysis of 1124 consecutive patients (pts) undergoing CAS at our institution between December 1997 and January 2015, 557 pts (49,6%) underwent stenting of the left carotid artery (group 1) and 567 pts (50,4%) of the right carotid artery (group 2). Thirteen patients with a simultaneous intervention of both carotid arteries were excluded from our analysis. The baseline data of both groups were similar (mean age 71.4 ± 38.9 years, 175 females (31.4%) in group 1 versus mean age of 71.9 ± 39.1 years and 189 females (33.3%) in group 2; no differences in comorbidities).

RESULTS CAS was successful in all but 32 patients (13 [2.3%] of them in group 1, and 19 [3.6%] in group 2, p=ns). The mean degree of stenosis was reduced from 85.5 ± 10.3% to 3.1 ± 6.4% in group 1, and 85.9 ± 9.6% to 3.5 ± 7.3% in group 2, respectively (p=ns). The mean stent length was 27.9 ± 6.7 mm in group 1 and 27.5 ± 9.8 mm in group 2 (p=ns), and the mean procedure time was not different between both groups (17.2 ± 11.4

STROKE AND STROKE PREVENTION

Wednesday, October, 14, 2015, 4:00 PM-6:00 PM

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TCT-752
Endovascular Therapy Versus Medical Therapy for Management of Acute Ischemic Stroke: Systematic Review and Meta-Analysis of Prospective Randomized Controlled Trials

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