rates of young, middle-aged, and elderly patients were 1%, 2%, and 5%, respectively (P<0.01). Annual adverse arrhythmic event rates were similar in the three age groups at ~1% (P=0.9). Independent predictors of mortality in young patients were age, female sex, volume of alcohol injected during ASA, and residual left ventricular outflow tract gradient.
Conclusions: ASA in younger patients with obstructive HCM was safe and effective for relief of symptoms at long-term follow-up. We propose that the indication for ASA can be broadened to younger patients.

P2314 | BEDSIDE
Mitral valve replacement at time of myectomy for hypertrophic obstructive cardiomyopathy

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Background: Surgical myectomy (SM) is the definitive treatment for symptomatic drug-refractory hypertrophic obstructive cardiomyopathy (HOCM). Isolated SM is effective in majority with minority requiring additional mitral valve repair (MVRr). Mitral valve replacement (MVRt) is largely avoided due to long-term complications of prosthetic valves. We aimed to examine temporal trends, clinical profile and outcomes of concomitant SM+MVRt in comparison to SM+MVRr.
Methods and results: From 2003–2011, 1557 and 743 HOCM patients underwent SM+MVRt or SM+MVRr, respectively as reported in Nationwide Inpatient Sample database. Number of SM+MVRt and SM+MVRr operations increased during study period (OR=1.068; 95% CI=1.048–1.089; and OR=1.255; CI=1.217–1.293; p<0.0001 for both). Compared to SM+MVRr, those with SM+MVt were older (63±13-vs-58±14 years) and had their surgery more often at rural (2.9%-vs-0%), non-teaching (86%-vs-72%) and Southern/Western (57%-vs-27%) hospitals (all p<0.001). Hospital mortality (8.2%-vs-4.7%), rate of any adverse event (57%-vs-44%), length of stay (14±11-vs-10±10 days), complete heart block (17%-vs-9%) and permanent pacer implantation (16%-vs-5%) were higher in those with SM+MVRt (all p<0.001). Other common findings among SM+MVRt were atrial fibrillation (49%), ventricular tachycardia (7%), SA node dysfunction (7%) and ventricular fibrillation (2.3%). Cardiac adverse events in SM+MVRt included acute CHF (6%), cardiogenic shock (5%), cardiac arrest (3%) and need for intraortic balloon pump (5.4%) or mechanical ventilation (16.2%). Periprocedural complications in SM+MVRt included renal failure (15%), vascular injury (11%), blood transfusion (8%), sepsis (7%), and stroke (5%).
Conclusion: Geographic and hospital characteristic differences were noted in rates of MVRt and MVRr at time of SM in HOCM persistently over the years. Some baseline differences existed between two groups and significantly higher rates of adverse outcomes, including hospital mortality, was observed in those with MVRt. Higher observed rate of MVRt compared to MVRr raises significant concern regarding best practices in management of HOCM.

P2315 | BEDSIDE
The Portuguese registry of hypertrophic cardiomyopathy (PRO-HCM): global results

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Aim: Most national registries on hypertrophic cardiomyopathy (HCM) were published before recent diagnostic and therapeutic advances and largely originate from major tertiary referral centers. We report the results of the Portuguese Registry of Hypertrophic Cardiomyopathy (PRo-HCM), a contemporary effort representing the entire spectrum of cardiology centers over the national territory.
Methods: A direct invitation to participate was sent to central and regional, public and private, academic and non-academic cardiology departments. Baseline and outcome data were collected and assessed.
Results: 29 centers participated; the total number of patients recruited was 1042; four centers recruited 49% of the patients; 59% were male and mean age at diagnosis was 53±16 years. HCM was identified as familial in 33%. The major reason for diagnosis was symptoms (53%). HCM was obstructive in 35% (labile in 11.5%, resting 88.5%); 11% had atrial fibrillation. Genetic testing was performed in 51%. Invasive septal reduction therapy was offered to 8% of the whole cohort (surgery 6%, alcohol septal ablation 2%), but to 23% of obstructive patients. Most patients (83.5%) had an estimated 5-year risk of sudden death <6%.
13% received an implantable cardioverter defibrillator, largely (88%) for primary prevention. After a mean follow-up of 5.3±6.1 years, median 3.3 years, interquartile range (P25-P75) 1.3 - 6.5 years, only 31% of patients were asymptomatic. All-cause mortality was 0.93%/year and CV mortality 0.48%/year. The incidence of HF-death was 0.26%/year, of SCD 0.13%/year and of stroke-related death 0.04%/year. HF-death plus heart transplant occurred 0.27%/year and SCD plus equivalents (succcessful cardio-pulmonar ressuscitation or appropriate ICD shocks in the setting of primary prevention) occurred with an incidence of 0.35%/year.
Conclusions: According to data from a large number of patients, contemporary HCM in Portugal is characterized by relatively advanced age at diagnosis and an important number of obstructive forms with invasive treatment. Long-term mortality is low, HF is the most common cause of death while SCD is uncommon. However, the burden of morbidity remains considerable, emphasizing the need for disease-specific treatments impacting the natural history of the disease.
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P2316 | BEDSIDE
Outcome of septal reduction therapies for obstructive hypertrophic cardiomyopathy in a high-flow referral centre with moderate volume procedural programmes

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Background: Surgical myectomy (SM) and alcohol septal ablation (ASA) decrease left ventricular outflow tract (LVOT) gradient in hypertrophic obstructive cardiomyopathy (HOCM) with durable symptom relief and low mortality when performed in experienced centres. Many HCM centres of excellence, however, are not primarily focused on invasive procedures and their interventional volumes are moderate. Yet, limited literature exists looking at outcomes of septal reduction therapies in such setting.
Purpose: To examine outcomes of septal reduction strategies for obstructive HCM at our institution, a long-standing high-flow referral centre with moderate volume procedural programmes; to examine the historical trends of referral to ASA vs SM over time.
Methods: A total of 125 HOCM patients (8% of the total HCM population) underwent invasive septal reduction treatments between 1999 and 2015 at our centre. All procedures were performed by the same experienced operators. Medical and instrumental data were acquired from pre-operative and follow up (FU) records.
Results: Patients were referred for invasive management at a mean age of 53±15 years and 67 (53%) were male. SM patients were younger (48±15 vs 58±13 years, p<0.01), less symptomatic (NYHA III/IV class: 52 vs 79%, p<0.01), had lower LVOT peak gradient (52±31 vs 70±33 mmHg, p<0.01) and lower prevalence of atrial fibrillation (15% vs 41%, p<0.01). ASA was the prevalent treatment from 1999 to 2005 whereas SM largely predominated after 2005.
At 30 days, 2 (1.6%) patients (one per treatment modality) died, 12 (9.6%) required permanent pacing (8% for SM – largely due to redo after ASA; and 11% for ASA), and 1 (1.4%) patient experienced sustained ventricular tachycardia after SM. Nine patients (16.7%) performed SM as a re-do procedure following ASA.
After 5±4 years, overall LVOT peak gradient was significantly reduced in all patients (from 60±32 to 15±16 mmHg, p<0.001). Postoperative values were lower in SM patients than the ASA group (11±10 vs 22±21 mmHg, p<0.001). ICD implantation rate for primary prevention was lower in SM patients (9% vs 34%, p<0.05). At 5 years, 86% of patients were alive, with a cardiac mortality rate of 1.3%/year. At the end of FU, the probability of a combined endpoint including cardiac mortality and re-intervention was 33.3% for ASA and 4.2% for SM (OR= 11.3, 95% CI= 3.1 to 41.2; p<0.001). Conversely, cardiac mortality alone did not differ between the two groups.
Conclusions: The present study shows excellent safety and efficacy outcomes associated with septal reduction strategies in a high-flow HCM institution with moderate procedural volume. Perioperative mortality was comparable to that of major surgical centres. SM showed better long-term results than ASA in the present study, although this finding must be weighed against a more adverse baseline clinical profile of the ASA population.

BEST POSTERS IN NEW TARGETS IN CARDIOVASCULAR DRUG ASSESSMENT

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Individual-specific corrected QT interval (QTcI) obtained from ECGs recorded at fixed timepoints versus QTcI derived using a wider range of stable heart rates from 24-hour Holter recordings

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Background/Introduction: The Fridericia (QTcF) method, a fixed QT correction method, is used to adjust for the effect of heart rate (HR) on the QT interval in Thorough QT (TQT) studies conducted during new drug development, but may not be reliable when assessing QT prolongation by a drug that increases HR by