

## Arrhythmias and Clinical EP

### ANTIARRHYTHMIC MEDICATIONS FOR ATRIAL FIBRILLATION APPEAR REASONABLY SAFE IN HYPERTROPHIC CARDIOMYOPATHY

Poster Contributions  
Poster Hall, Hall C  
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Abstract Category: 8. Arrhythmias and Clinical EP: Supraventricular/Ventricular Arrhythmias  
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**Background:** In patients with hypertrophic cardiomyopathy (HCM) atrial fibrillation (AF) is common, often poorly tolerated and difficult to treat. Limited data exists regarding safety and efficacy of drugs used for AF rhythm control in HCM patients.

**Methods:** A retrospective analysis was performed of patients with HCM and AF followed for at least six months treated with amiodarone, sotalol, dofetilide and disopyramide. Post-operative AF was excluded. The duration followed on each medication, reasons for discontinuing, incidence of adverse events were recorded. Confounding factors including maximal septal thickness, age, LVEF, and gender were assessed.

**Results:** 98 patients had 131 drug treatments (defined as a continuous time on 1 drug), 23 patients were treated with more than one medication. Amiodarone and Sotalol were rarely stopped for inefficacy, all medications showed a low incidence of both side effects causing cessation and any safety events (Table 1). Increased maximum septal thickness correlated with incidence of safety events in multivariate, non-parametric analysis (p=0.01).

**Conclusions:** Drugs studied were well tolerated with a low risk for serious adverse drug related events. Sotalol had a low incidence of side effects or safety events and was rarely stopped for inefficacy, which likely makes it a first line choice in this young population. Because these drugs are reasonably safe, they may be considered for treatment of symptomatic AF in patients with HCM.

Table 1.

Medication	Average Age at Start of Treatment	Taking at 12 mo (%)	Average Follow Up in Years (Standard Deviation)	Inefficacy Causing Cessation	Safety Events	Side Effects Causing Discontinuation
Sotalol	55.2	27 (58.7)	4.3 (3.2)	12 (8.7%)	4 (8.7%) Non-sustained VT (n=4)	1 (2.2%) Shortness of breath (n=1)
Amiodarone	55.4	19 (40.4)	3.6 (3.1)	4 (8.5%)	0 (0%)	9 (19.1%) Pulmonary (n=5) Thyroid (n=1) Visual (n=1) Other (n=2)
Disopyramide	55.5	7 (38.9)	3.8 (3.6)	5 (22.2%)	4 (22.2%) Anaphylaxis (n=1) Non-sustained VT (n=1) Sustained VT (n=1) QTc prolongation (n=1)	4 (22.2%) Anticholinergic (n=3) Other (n=1)
Dofetilide	56.1	13 (65.0)	4.0 (3.2)	6 (20.0%)	5 (25.0%) Non-sustained VT (n=2) Symptomatic bradycardia (n=1) Syncope (n=2)	3 (15.0%) Headache (n=1) GI (n=1)