

 **CARDIAC ARRHYTHMIAS**

CARDIAC RESYNCHRONIZATION THERAPY FOR PATIENTS WITH HEART FAILURE AND CHRONIC ATRIAL FIBRILLATION.

ACC Poster Contributions
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Background: Efficacy of cardiac resynchronization therapy (CRT) for patients with chronic atrial fibrillation (CAF) has not been fully evaluated.

Methods & Results: CUBIC study is a multi-center registry of Japanese patients undergoing CRT between Apr. 2004 and Dec. 2008. Data of 680 patients from 11 institutions were available. The population of this study consisted of 445 patients with baseline LVEF \leq 45% and paired UCG data (at baseline and 6 months after CRT). We compared improvement in LV function between patients with and without CAF (74 and 371 patients, respectively). The baseline characteristics were as follows; Age: 72 vs. 68 (years); Male: 74 vs. 68 (%); NYHA IV: 12 vs. 11 (%); Previous PM: 53 vs 29 (%)*; Diabetes: 30 vs 33 (%); Creatinine > 1.5 (mg/dl): 31 vs 26 (%); IHD: 20 vs. 31 (%); LVEF: 29 vs. 26 (%); LVEDV: 201 vs 214 (ml) BNP: 554 vs. 678 (pg/dl); QRS duration: 154 vs. 147 (msec); (CAF vs. non-CAF, *p<0.05). LVEDV decreased by \geq 10% in 50% and 58% (P=0.21), LVESV decreased by \geq 15% in 54% and 56% (P=0.73), and LVEF increased by \geq 25% in 45% and 44% (P=0.92), respectively.

Conclusions: CRT was equally effective in patients with and without CAF, in terms of similar degree of improvement in LV function.

CAF vs. non-CAF

	CAF	non-CAF	p value
pre LVEDV	201 ml	214 ml	0.26
6Mo LVEDV	177 ml	184 ml	0.64
decrease in LVEDV \geq 10%	50 %	58 %	0.21
pre LVESV	146 ml	161 ml	0.07
6Mo LVESV	119 ml	130 ml	0.22
decrease in LVESV \geq 15%	54 %	56 %	0.73
pre LVEF	29 %	26 %	0.003
6Mo LVEF	35 %	33 %	0.04
increase in LVEF \geq 25%	45 %	44 %	0.92