

 **CARDIAC ARRHYTHMIAS**

**CONTINUOUS RIGHT VENTRICULAR APICAL PACING MIGHT AFFECT ON LEFT VENTRICULAR SYSTOLIC AND DIASTOLIC FUNCTION**

ACC Poster Contributions

Ernest N. Morial Convention Center, Hall F

Tuesday, April 05, 2011, 9:30 a.m.-10:45 a.m.

Session Title: RV Pacing and Atrial Tachyarrhythmia in PPM Recipient

Abstract Category: 28. Cardiac Pacing

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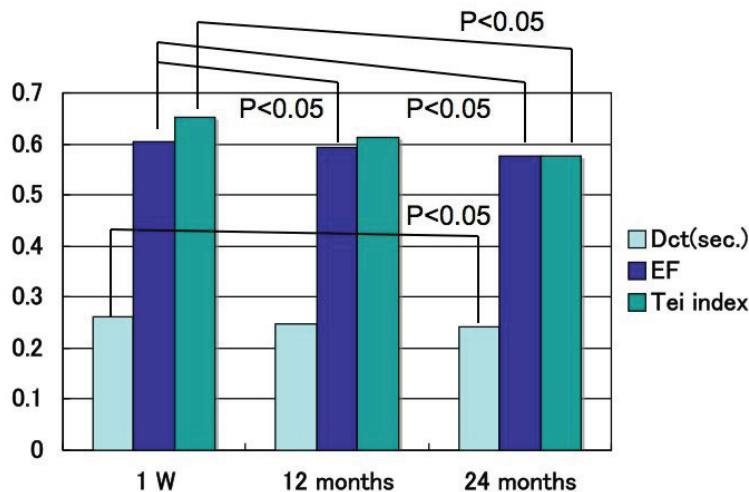
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**Background:** Purpose: To elucidate longterm outcome after continuous right ventricular pacing for systolic and diastolic cardiac function.

**Methods:** Forty patients with advanced or complete atrio-ventricular block who needed permanent pacemaker and their ejection fraction were more than 45% were analyzed. Their cardiac function were evaluated by cardiac echocardiography at pre-implanation, one week after implanatation, 12 months and 24 months after pacemaker implantation. Ventricular permanent pacemaker lead were all placed at right ventricular apex. And optimal atrio-ventricular delay were adjusted by echocardiography within 1 week after implanatation.

**Results:** Mean age was 71.7 and percent male was 46.2%. QRS width were changed as followings, 161.4msec(1W), 165.3msec(12M) and 165.9msec(24M). Percent ventricular pacing were 99.4%(1W), 98.1%(12M) and 98.0%(24M). Ejection fraction decreased gradually after pacemaker implantation, 1W-12M(0.605-0.592,P=0.0065),1W-24M(0.605-0.576,P=0.0017) respectively. Also deceleration time and Tei index were significantly reduced, 1W-12M(261.1msec-247.2msec,P=0.1809),1W-24M(261.1msec-242.9msec,P=0.0310), 1W-12M(0.652-0.612,P=0.0832),1W-24M(0.652-0.576,P=0.0071)

**Conclusion:** Continuous long term right ventricular apical pacing might reduced both systolic and diastolic cardiac function.



The alteration of cardiac function in echocardiography