

## Heart Failure

### FRAGMENTATION OF WIDE QRS AS A PREDICTOR OF MORTALITY IN PATIENTS WITH HEART FAILURE WHO RECEIVED A BIVENTRICULAR PACE MAKER FOR CARDIAC RESYNCHRONIZATION THERAPY

Poster Contributions

Poster Sessions, Expo North

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**Background:** Fragmentation of wide QRS (f-wQRS, QRS >120 ms) predicts mortality in patients with coronary artery disease and heart failure (HF). We postulated that f-wQRS predicts mortality in patients who received cardiac resynchronization therapy (CRT) for standard indications.

**Methods:** We studied the clinical, ECG, and echo parameters as well as mortality data of 79 veterans (age 62±11, all males, NYHA class 3.1±0.3 HF, mean follow-up: 24±20 months) who received CRT. f-wQRS was defined by the presence of >2 notches on the R wave or the S wave, and had to be present in >2 contiguous inferior (II, III, aVF), lateral (I, aVL, V6) or anterior (V1-V5) leads even in the presence of a bundle branch block (BBB). BBBs have only two peaks or notches, whereas f-wQRS have >2 notches or peaks.

**Results:** 43(54%) patients had f-wQRS. The age, CHF class, ICD shock rates, drug therapy did not differ between f-wQRS group vs. non-f-wQRS group. 24(30.4%) patients died, 19(35%) patients in the f-wQRS group and 5(13%) in the non-f-wQRS group (p=0.001). Kaplan Meier survival analysis revealed a significantly decreased time to death. Multivariate predictors of death were f-wQRS (p =0.004, risk ratio: 3.8 [ , 95% CI:1.45-10.37]). Age, EF, CHF class, diabetes and prior myocardial infarction did not predict mortality.

**Conclusions:** f-wQRS is an independent predictor of mortality in patients with CRT.

