EFFECT OF GENDER DIFFERENCE ON CLINICAL OUTCOMES AFTER CARDIAC RESYNCHRONIZATION THERAPY IN CUBIC REGISTRY

ACC Moderated Poster Contributions
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Background: Female gender is reported to be preferred to receive CRT compared to male. However, precise effect of gender difference on clinical outcomes after CRT is not well known.

Methods: We investigated 651 patients from CUBIC study which is a multi-center CRT registry in Japan and divided into two groups, 197 female (30%, F), 454 male (70%, M).

Results: Mean follow up were 22+/15 months. F was older (71 years vs. 68 years, p=0.01) and more likely to have wide QRS (155 ms vs. 148 ms, p=0.027) and non-ischemic etiology (83% vs. 62%, p<0.0001) compared to M. M was more likely to have diabetic (39% vs. 20%, p<0.0001), chronic kidney disease (32% vs. 17%, p<0.0001), AF (33% vs. 25%, p=0.036), VT/VF (19% vs. 12%, p=0.027) and larger LV size (64mm vs. 60mm, p<0.0001). CRT-D were more frequently indicated in M than in F (65% vs. 47%, p<0.0001). NYHA class (F: 2.9 vs. M: 2.9) and LVEF (F: 29% vs. M: 28%) were similar between two groups. NYHA class at 6-month was better in F (2.0 vs. 2.2, p=0.01), but, responder rate (LVESV reduction > 15%, 63% vs.62%, p=ns) was similar between F and M. The event free survival rates from combined death and heart failure hospitalization and ventricular arrhythmic events were significantly higher in F(71 % vs.60% at 2-year, Log-rank p=0.038, 79% vs.67% at 2-year, Log-rank p=0.001, respectively).

Conclusion: Female gender with heart failure has fewer commodities and seems to have preferable clinical outcomes compared male gender after CRT.