Poster Contributions
Hall C
Monday, March 31, 2014, 9:45 a.m.-10:30 a.m.

Session Title: Device Therapy in Patients with Heart Failure and Cardiomyopathy
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Authors: Marcelino Cortes, Elena de la Cruz, Julia Anna Palfy, Angelica Maria Romero Diaz, Paloma Avila Barahona, Ignacio Hernandez, Juan Antonio Franco Pelaez, Juan Benezet-Mazuecos, Jose Rubio Campal, Jeronimo Farre, Hospital Universitario Fundacion Jimenez Diaz, Madrid, Spain

Background: Cardiac Resynchronization Therapy (CRT) in patients with heart failure (HF) and a widened QRS complex improves clinical outcomes and reduces mortality in selected patients. Its role in patients aged ≥75 years, is not well established.

Methods: From January 2008 to April 2012 we have recruited prospectively 607 patients aged ≥75 years that had a left ventricular ejection fraction (LVEF) ≤35%. From this group, we identified 78 patients with a potential indication of CRT according to current recommendations. The final indication of a CRT device was based on the decision of the patient and/or the attending cardiologist.

Results: During follow up, a CRT-ICD was implanted in 34 cases (44%). This group, as compared with patients on medical therapy alone, was significantly younger (79 vs. 83, p < 0.001), had a lower LVEF (23% vs 27%, p 0.008), and were more often in NYHA functional class III-IV (53 vs 25%, p 0.01). CRT patients received more frequently than medically treated patients beta blockers (88% vs 66%, p 0.023) and anti-aldosterone drugs (82% vs 50%, p 0.003). After a median follow up of 26 months, 27 patients (35%) died, 7 (21%) in the CRT group and 20 (46%) among non-CRT patients. Death or hospitalization for HF was recorded in 48 patients (62%), 20 (59%) in the CRT group and 28 (64%) in the medical therapy group. During follow-up, 15 patients in CRT group (44%) improved their LVEF by >40%. In the CRT group, 12 patients (35%) improved their functional class by ≥1 degree, and mitral regurgitation (MR) improved in 4/9 patients with grade III or IV MR before CRT implant (44%). Multivariate Cox regression survival analysis showed a reduction in total mortality in the CRT group (HR 0.162 [95% CI 0.58-0.46]) but the combined endpoint of mortality or hospitalization was not reduced.

Conclusion: In our population CRT therapy as compared with optimal pharmacologic treatment reduced total mortality by 54%. In the CRT group, 15 patients (44%) improved their LVEF by >40%, and 12 patients (35%) improved their functional class. CRT implantation in patients aged ≥75 years should follow similar recommendations to those accepted for younger subjects.