

17th European Heart Disease and Heart Failure Congress &

2nd International Conference on

Cardiovascular Medicine and Cardiac Surgery

March 15-17, 2017 London, UK

Short term outcome of cardiac resynchronization therapy on functional recovery of patients with congestive heart failure in Bangladeshi population

Umme Habiba Ferdaushi

National Institute of Cardiovascular Diseases (NICVD), Bangladesh

Background & Aim: Cardiac resynchronization therapy (CRT) reduces symptoms and improves left ventricular function in patients with heart failure due to left ventricular systolic dysfunction and cardiac dyssynchrony. We analyzed the clinical and echocardiographic outcome of CRT in heart failure patients.

Methods: A total 35 heart failure patients were included in this prospective observational study, conducted from Feb 2015–Feb 2016 in the cardiology department of NICVD, Dhaka. Demographic profile, clinical data and investigations including coronary angiogram were done. Patients underwent CRT-P (BiV pacemaker) or CRT-D (defibrillator) and were followed up. Clinical, electrocardiographic and echocardiographic study were performed before and three months after CRT implantation.

Results: After three months of BiV pacing, New York Heart Association functional class improved from 3.3 ± 0.44 to 1.7 ± 0.6 ($p < 0.001$). Left ventricular end diastolic diameter was reduced from 67.9 ± 5.2 to 61.9 ± 5.9 mm ($p < 0.001$) and left ventricular end systolic diameter was reduced from 56.4 ± 6.5 to 50.5 ± 7.2 mm ($p < 0.001$). Ejection fraction was significantly increased after three months from $27.5 \pm 4.3\%$ to $38.8 \pm 6.7\%$, ($p < 0.001$). The average grade of mitral regurgitation was decreased from 1.49 ± 0.65 to 0.43 ± 0.61 ($p < 0.001$). The number of hospitalization was also significantly reduced from 2.51 ± 1.44 to 0.11 ± 0.32 ($p < 0.001$). Among the study patients, 71.4% patient was responders, 17.1% super responders and 11.4% non-responders.

Conclusions: Although the study was performed on a small number of patients, it can be considered that CRT had favorable hemodynamic and clinical results and reduced the need for hospitalization in our heart failure patients.

Biography

Umme Habiba Ferdaushi has completed her MBBS at Shere Bangla Medical College, Barisal, Bangladesh and fellowship in Cardiology at Bangladesh College of Physicians and Surgeons (BCPS), Bangladesh. She works at National Institute of Cardiovascular Diseases (NICVD), a tertiary level cardiovascular institute. She has published three papers in reputed journals.

drhabiba30@yahoo.com

Notes: