Cardiac resynchronisation therapy

Naresh Sen1, S Jagdish2 and Sonal Tanwar2
1Narayana Hrudayalaya Institute of Medical Science, India
2Rajasthan University of Health Sciences, India

Background: CRT (Cardiac Re-synchronization Therapy) has been approved beneficially in heart failure patients with refractory optimized medical therapy based on many studies. The guidelines have shown CRT is indicated in NYHA class III-IV, QRS>150 ms, LBBB (Left bundle branch block) to improve heart functions, ventricular re-modeling and clinical symptoms.

Purpose: Comparison of stress induced mechanical dys-synchrony between rate dependent LBBB and RBBB (Right bundle branch block) and beneficial role of CRT to improve LV function and reduce mortality.

Method: Patients presenting dyspnea on exertion NYHA class I-II to III-IV by stress test, normal QRS to rate dependent LBBB or RBBB by Stress test or Dobutamine Stress Echo were studied. CRT on cardiac function was assessed by Cath-study, Echo and MRI (Magnetic Resonance Imaging).

Result: 12-months observational study done on stress induced rate dependent LBBB and RBBB with worsening dys-synchrony and poor LV function were treated with CRT. Results have shown improved LV function in rate dependent LBBB patients (31±6%) vs. RBBB patients (4.5±4%) with P value<0.04. and reduce mortality among rate dependent LBBB with CRT vs. without CRT (5% vs. 20%) and another side mortality difference between rate dependent RBBB with CRT and without CRT were not found significantly.

Conclusion: Stress induced rate dependent LBBB with mechanical dys-synchrony leads to heart failure is benefited by CRT than Rate dependent RBBB.

Biography
Naresh Sen is a Consultant Cardiologist affiliated with Narayana Hrudayalaya Institute of Cardiac Science, India. He got his medical graduation from Rajasthan University, Jaipur and post-graduation in internal medicine from South America and post doctoral training in Cardiology from Cacos & Turks. He has also been elected for Fellowship award of various societies of Cardiology. He worked in Cardiology (Invasive & Non-Invasive) as Registrar or Consultant at renowned cardiac hospital ports of India like NH & Medanta last 5 years. He has special interest in coronary artery disease and heart failure prevention. He has published around 50 publications in Cardiology. For his hard work, he was awarded as best cardiology consultant in Rajasthan, 2013 by Director of AIIMS, New Delhi.

dnaresh.sen@gmail.com

Notes: