**Introduction**: The benefits of CRT in a select population of heart failure patients with LBBB is beyond question. However, despite numerous parameters assessed over the years, up to 30% of patients still do not respond to this therapy. To overcome some of the limitations of standard parameters, we evaluated newer indices.

**Methods**: We prospectively evaluated 43 patients who were to undergo CRT out of which 32 patients follow up done. During the evaluation, we assessed AMM septal to lateral (S-L) wall and septal to posterior (S-P) wall delays and mitral valve velocity time integral (MVVTI) index and radial strain.

**Result**: QRS duration, Anatomical M mode delays and PLAX septal to posterior delay in pre and on follow up were statistically significant.

**Conclusion**: As expected, there was marked narrowing of the QRS after CRT. While the Anatomic M Mode parameters improved, the Radial Strain and the MV VTI did not show significant change.