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Spring 5-1-2021

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PERMANENT PACEMAKER IMPLANTED PATIENTS
–PROSPECTIVE COHORT STUDY**

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IMPACT OF RV PACING ON LA STRAIN AMONG THE PERMANENT PACEMAKER IMPLANTED PATIENTS – PROSPECTIVE COHORT STUDY

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BACKGROUND: There is sparse knowledge on assessment of LA function among pacemaker implanted patients. LA strain being a novel application of echocardiography is not been studied well in the literature. The long term effect of RV pacing on LA strain not much addressed in many studies. LA performance due to RV pacing and its effect on LV function needed to be studied in detail. To Look for changes in LA strain pre and post-implantation of Pacemaker

OBJECTIVES: 1. To assess LA strain in RV pacing in between Single and Dual chamber pacemaker implanted patients. 2 To look for association of LA strain and structural changes on Atrial Arrhythmias [like AF] due to RV pacing. 3. To compare frequency of RV pacing on LA strain between sick sinus syndrome and CHB

METHOD: Patient who admitted for Permanent pacemaker implantation were included for Screening for Baseline data and were followed between the period of 6 months and 12 months. Among PPI patients we looked for, LA volume assessment[Vol max, Volmin, Volp, LA expansion index, LA Passive emptying fraction, LA active emptying fraction, 2D and PW Trans mitral inflow[Mitral annular area, peak A wave velocity, Atrial ejection fraction, STE[LA strain]

RESULTS&CONCLUSION: The Impairment in atrial function with RVA pacing, suggesting the decrease in LA strain. The assessment of LA function was made possible, reliable and highly reproducible only because of the echocardiographic features including 2D echo, tissue Doppler indices and strain. The LA enlargement and impaired atria contraction is induced by RVA pacing. Functional changes in the LA leading to LA remodeling that lead to LA dysfunction