

**IMPORTANCE OF RIGHT VENTRICULAR LEAD POSITIONING IN DETERMINING OUTCOMES OF CARDIAC RESYNCHRONIZATION THERAPY**

Poster Contributions  
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**Background:** Cardiac resynchronization therapy improves clinical outcomes in patients with heart failure and left ventricular asynchrony. Optimal position of the right ventricular lead is unknown and there is conflicting data on the acute hemodynamic effects and long term outcomes.

**Methods:** We present a case from the University of Arkansas for Medical Sciences.

**Results:** We present a case of a patient who underwent implantation of a dual chamber pacemaker for complete heart block. However, three months later, the patient developed Class IV NYHA heart failure symptoms. After failure of optimal medical therapy and placement of a left ventricular lead in the postero-lateral branch of the coronary sinus, he still remained symptomatic. At this point, the right ventricular lead was repositioned from the right ventricular outflow tract to the right ventricular apex. Afterwards, the patient's symptoms improved and went from Class IV NYHA heart failure to Class II and his left ventricular ejection fraction improved from 20% to 45%.

**Conclusions:** This is an interesting case demonstrating lack of response to resynchronization therapy despite an ideal left ventricular lead position. However, the position of the right ventricular lead and changing the vector between the left and right ventricular leads was the determining factor for the clinical outcome.