PO-644-02

CARDIAC CONTRACTILITY MODULATION AND AMBULATORY MILRINONE FOR CONGESTIVE HEART FAILURE: WHO GETS OPTIMIZED?

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Background: Cardiac Contractility Modulation (CCM) is indicated for patients with Class III systolic congestive heart failure (CHF), ejection fraction (EF) 25-45% and narrow QRS not indicated for biventricular pacing. CCM efficacy in patients also managed with intravenous inotropic therapy is unknown due to exclusion in all trials in CCM.

Objective: Describe our experience for CCM in patients also managed with continuous intravenous milrinone.

Methods: All patients at our institution managed with intravenous milrinone and also fulfilling approved indications were offered CCM implantation. Patients were additionally followed for change in CHF status and medication management.

Results: In 33% of observed patients, milrinone was stopped. One patient showed improved EF (25% to 40%), CO, CI and NYHA classification change from III Stage D to NYHA Class II. A second patient demonstrated increased EF, CO, CI and NYHA classification improvement to NYHA Class I two months after implant. All patients remained on beta blocker post-implant. Reduced renal function limited diuretic use. Likewise, reduced renal function limited diuretic use. One patient discontinued both spironolactone and milrinone with improved NYHA classification after implant. Of the 67% of patients diagnosed with WHO Group II PHTN prior to implant, two patients died, and one continues IV milrinone post implant. One patient discontinued both spironolactone and milrinone with improved NYHA classification after implant. Of the 67% of patients diagnosed with WHO Group II PHTN prior to implant, two patients died, and one continues IV milrinone post implant. One patient, in whom milrinone was discontinued, no longer qualifies for WHO II PHTN diagnosis.

Conclusion: This ongoing observational study’s objective was to assess medication management after CCM implant in patients on continuous IV inotropic therapy, as well as CCM efficacy. In our NYHA Class III Stage D CHF population, CCM efficacy and benefit appears to be limited in patients with established WHO group II PHTN and require continued milrinone post implant.
Renal dysfunction limited CHF guideline-directed medication therapy utilization in all patients. Benefits in renal function after CCM implant in this CHF population remains to be seen. Utilization of CCM in patients comanaged with milrinone needs to be individualized.

PO-644-04

IMPACT OF HOME MONITORING PLATFORM SCALE AND GAIN SETTINGS ON PWAVE VISIBILITY FROM INSERTABLE CARDIAC MONITOR RECORDINGS

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Background: Visibility of Pwaves on electrograms (EGM) obtained by insertable cardiac monitor (ICM) is useful for clinicians when differentiating and defining captured arrhythmia.

Objective: To assess factors impacting Pwave visibility on EGMs obtained from home monitoring transmissions for two different ICM vendors.

Methods: Real-time sinus rhythm EGMs from Biotronik BioMonitor3 (BM3) and Medtronic LINQ were downloaded from home monitoring transmissions. Strips were obtained from each home monitoring platform in a 1:2 (BM3:LINQ) ratio with one strip per patient. Gain settings were not adjusted from the nominal setting (either 0.1mV or 1mV scale for LINQ, vs. variable 0.2mV scale for BM3). Strips were viewed by 3 electrophysiologists independently (investigators KRT, GDY & CXW) and classified as Pwave ‘visible’, ‘partially visible’ or ‘not visible’.

Results: 120 strips were obtained from 40 BM3 and 80 LINQ patients, with both groups being well matched for gender and BMI (p>0.05). The 3 assessors adjudicated that Pwaves were not visible or partially visible for between 16.3 - 48.8% of LINQ strips, compared to between 5.0 - 27.5% of BM3 strips (p<0.001). There were 17 LINQ traces with 1mV scale, all having Rwaves >0.9mV amplitude, which were adjudicated to have not visible or partially visible Pwaves for between 47.1 - 88.2% of traces. Interobserver reliability was good with an intraclass correlation coefficient of .81 (.95%CI .74-.86).

Conclusion: Visibility of Pwave was better for BM3 compared to LINQ, which was impacted by the automated gain and scale settings. Manufacturers should allow for variable gain and scale settings on home monitoring platforms to improve P wave visibility.

PO-644-05

CONCURRENT LEADLESS PACEMAKER INSERTION DURING TRANSCATHETER AORTIC VALVE REPLACEMENT: A CASE SERIES

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Background: Complete heart block requiring permanent pacemaker implantation occurs in approximately 10% of patients (pts) undergoing transcatheter aortic valve replacement (TAVR), and in approximately 40% of TAVR pts who have preexisting right bundle branch block (RBBB). It is unknown whether it would be