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-644-03
IMPACT OF PRE-PROCEDURAL PLANNING WITH A NOVEL CARDIAC CT SOFTWARE PLATFORM ON THE EFFICIENCY OF A LEFT ATRIAL APPENDAGE CLOSURE PROCEDURE
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Background: Percutaneous left atrial appendage closure (LAAC) is an accepted option for stroke prevention in high-risk patients with atrial fibrillation (AF) unable to take long-term oral anticoagulation. Cardiac CT scans are increasingly being used for pre-procedural planning of structural heart procedures. However, the impact of pre-procedural planning on LAAC procedures is unknown.

Objective: To determine if pre-procedure planning with cardiac CT prior to LAAC increases the efficiency of the procedure.

Methods: This single-center retrospective analysis assessed all patients who underwent LAAC using the Watchman FLX (WFLX) device. Once commercially available, a pre-procedure CT scan was performed in patients being scheduled for a WFLX implant and analyzed using the TruPlan (TP) software. This software allows assessment of the LAA (absence of thrombus, size and morphology) and determines the optimal location for transseptal puncture, delivery sheath, device size and viewing angles on fluoroscopy. We compared several metrics of procedural efficiency based on use of the TP software.

Results: Our cohort included 111 patients (78 ± 8 years; 64% male; CHA₂DS₂-VASC score 4.5 ± 1.4; HASBLED score 3.4 ± 1.1; paroxysmal AF 50%). The main indication for LAAC was prior bleeding, which was present in 87 (78%) patients. LAAC was successfully performed in 108 (97%) patients. The TP software was used in 56 (50%) patients. There was concordance between suggested device size and actual device size used at implant in 45 (82%) patients. Pre-planning significantly reduced procedure time and likelihood of needing >1 device. This increased the lab efficiency, as defined by the LAAC case volume (based on a single imager and anesthesiologist) performed in a single day.

Conclusion: Our data, for the first time, show the value of using a dedicated cardiac CT software for pre-procedure planning of LAAC with the WFLX device. By reducing the number of devices used, procedure times decreased by 29%, which translated into a 50% improvement in lab efficiency.

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 (53% male, mean BMI 26.7 kg/m²; both p = NS). 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 (table). There were 17 LINQ traces with 1mV scale, all having Pwave >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
He noted that over the preceding week, the WD had been alarmed and deployed dye/gel just prior to syncope and shock. After another syncopal episode resulting in facial lacerations, the defibrillator (WD) was started on metoprolol and discharged with wearable implantable cardioverter-defibrillator (ICD) was recommended, had provoked Brugada syndrome (BrS) Type 1 pattern. An catheterization revealed non-obstructive coronary artery disease and TAVR-related complete heart block. The total procedural time and hospital LOS were reviewed to evaluate procedural efficiency. Results: Between Sept 2020 and Dec 2021, 6 pts underwent TAVR and leadless PPM implantation during the same procedure. All pts prior to TAVR were identified as high risk for potential need of PPM support and consented prior to the procedure. Four of the pts had preexisting RBBB, and 2 pts had preexisting left anterior fascicular block. All pts had a normal LVEF at the time of implant. One pt underwent a Micra VR device and 5/6 pts underwent Micra AV implant for CHB noted during the procedure. The average age was 83.5 yo (+/- 6.8) with a BMI of 30.6 (+/- 6.3). The average pacing percentage at discharge was 66.8% (+/- 37.2) and the average pacing percentage at 2-week f/u in 3/6 pts was 98.1% (+/- 1.3). Three pts have not had f/u testing. The average total procedural time was 157 min (+/-40) with an average leadless PPM implant time of 53 min (+/-20). The average hospital LOS was 55 hr. There were no reported 30-day complications.

Conclusion: Performing TAVR and leadless PPM implantation during the same procedure may improve efficiency and reduce hospital LOS in pts requiring permanent pacing following TAVR. Further analysis of this strategy to assess pt safety, pt satisfaction and health care utilization is warranted. Collaboration between interventional cardiologists and cardiac electrophysiologists may allow for efficient care of TAVR pts with pre-existing conduction system disease.

PO-644-06

NOT EVERYTHING IS AS IT SEEMS-CONCOMITANT BRUGADA SYNDROME AND CORONARY VASOSPASM CAUSING VF ARREST

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Background: Sudden cardiac death (SCD) is the leading cause of death in the United States, and is most commonly associated with underlying coronary artery or other structural heart disease (SHD).

Objective: To describe a case of patient without overt SHD with recurrent ventricular fibrillation (VF) and 2 concomitant uncommon causes of SCD.

Methods: N/A

Results: A 49 year old healthy man with history of hypertension experienced syncope while driving. While in the ambulance, he had ventricular fibrillation requiring defibrillation. Echocardiogram and cardiac MRI were normal. Cardiac catheterization revealed non-obstructive coronary artery disease. With procainamide challenge in the EP laboratory, he had provoked Brugada syndrome (BrS) Type 1 pattern. An implantable cardioverter-defibrillator (ICD) was recommended, but patient preferred to have second opinion and therefore he was started on metoprolol and discharged with wearable defibrillator (WD). He presented to our institution ~ 1 week later after another syncopal episode resulting in facial lacerations. The WD did alarm and deploy dye/gel just prior to syncope and shock. He noted that over the preceding week, the WD had been alarming, causing him to repeatedly push the button to avoid shocks. Review of electrograms from the WD (panel A) revealed multiple episodes of non-sustained polymorphic VT (ns-PMT) and VF. He was taken to the EP laboratory the same day for epicardial ablation for BrS. A small patch of abnormal voltage and electrograms (EGMs) noted in the epicardial right ventricular (RV) outflow tract region (panel B). The abnormal EGMs were eliminated with ablation. He was started on quinidine and restarted on metoprolol post procedure. A few days later, he had recurrent ns-PMV that was preceded by dramatic ST elevation and QRS widening consistent with coronary vasospasm (panel C). Metoprolol was discontinued and verapamil was started. ICD was implanted prior to discharge. Quinidine was later discontinued and over months of follow-up he has had no further PMVT or VF.

Conclusion: We describe a case of recurrent VF caused by concomitant BrS and coronary artery vasospasm. A combination of catheter ablation targeting the epicardial substrate of BrS and coronary vasodilator therapy to prevent recurrent spasm was effective to prevent recurrent VF.

PO-644-07

IMPLANTABLE LOOP RECORDER UTILIZATION IN PATIENTS WITH BREAST AUGMENTATION

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Background: Implantable loop recorders (ILR) are subcutaneous devices that offer long-term cardiac rhythm monitoring in patients with unexplained syncope, palpitations, or cerebrovascular accident. The utilization of ILRs in numerous patient populations has been growing. Though the implant procedure is minimally invasive, patients with breast augmentation and implants provide unique challenges and safety concerns.

Objective: To identify a favorable and safe implant technique for implantable loop recorder insertions in patients with breast implants.