Abstract 42 Figure 1 Survival probability

Abstract 42 Figure 2 ICD Subtypes

male. These include 80 CRT-Ds, 121 Dual chamber ICDs, 206 Single Chamber ICDs, and 7 Subcutaneous-ICDs (SICD). (Figure 2). In the case of upgrades, only the most recent device was included. 3 ICDs were explanted without replacement, 2 due to infection, and 1 due to heart transplant. 95 patients (22.9%) with local follow up died (in whom a date of death is available in 87 patients). 4 (1.0%) patients were lost to follow up. 6 (1.4%) patients emigrated, and 21 (5.1%) patients moved hospital within the state. Among the patients not known to have died or moved centre, the mean duration since the most recent ICD check was 4.8 months. Of the patients who died, the mean time between device insertion and death was 51.6 months $\pm$ 30.2, and 6 (1.4%) patients died within a year of ICD insertion. Survival probability at 1, 3 and 5 years was 97.9%, 88.7% and 79.6% respectively.

Discussion This study shows the increasing burden, and complexity, of devices being implanted within our centre. Despite our study not differentiating between primary and secondary prevention, our study shows reassuring survival probability at 5 years when compared with SCD HEF (71.1%) and at 3 years when compared with MADIT (78%).

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MICRA TRANSCATHETER PACING SYSTEM IMPLANTATION AND OUTCOMES IN A SINGLE CENTRE

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Introduction and Objectives Traditional cardiac pacemakers incorporate transvenous leads. Recently leadless pacemakers

have been approved. The Micra™ pacemaker is such a device which is inserted percutaneously via the femoral vein into the right ventricle. The device is capable of providing single chamber pacing, sensing and accelerometer based rate response. Our objective was to evaluate indications, electrical parameters at insertion, complications and follow-up of 21 patients between 2017 and 2019 who underwent Micra™ pacemaker insertion at our institution.

Methods This was a retrospective, observational study. All patients who had a Micra™ pacemaker insertion in MMUH between 2017 and 2019 were included. Patient data was extracted from electronic hospital records.

Results 21 patients (61.9% male) had a Micra pacemaker implanted (table 1). The mean age was 42.7 ± 17.7 years (range, 19–81). Patient co-morbidities included cardiomyopathy (71.4%) previous history of intracardiac lead (33.3%), right sided valve surgery (19%), chronic kidney disease (14.3%), previous stroke (9.5%), diabetes (9.5%), and previous device infection (9.5%). The most common underlying cardiomyopathy was congenital cardiac disease (61.9%). 7 patients had underlying valvular heart disease (33.3%) and 1 patient had non-ischaeamic dilated cardiomyopathy.

All 21 Micra pacemaker devices were implanted successfully. 80.1% of devices were inserted into the right ventricular septum, with 2 devices inserted into the apex and the right ventricular outflow tract. 18 devices were successfully positioned on first attempt and 3 devices required repositioning (14.3%).

There was one complication recorded. This was a pericardial effusion with tamponade, in a patient who was also undergoing lead explant. 3 patients had been lost to follow-up, with device checks occurring in other centres. 2 patients had died. The maximum duration of follow up was 2.9 years

Abstract 43 Table 1 Pacing indication

Pacing Indication	Number of Patients (Total 21)
Sinus Pauses	7 (33%)
Congenital AV Block	5 (24%)
Mobitz II AV Block	3 (14%)
Complete Heart Block	2 (9.5%)
Tachy-Brady Syndrome	2 (9.5%)
Mobitz I AV Block	1 (5%)
AV Node Ablation	1 (5%)

Abstract 43 Table 2 Implantation and follow-up parameters

		Parameters at Implantation	Parameters at Follow-Up
Pacing threshold (V)	Mean	0.58 ± 0.31	0.77 ± 0.7
	Range	0.25 – 1.38	0.38 – 2.88
R wave amplitude (mV)	Mean	10.64 ± 4.31	13.7 ± 5.8
	Range	4.5 – 20.0	2.6 – >20.0
Impedance (Ω)	Mean	813 ± 175	558 ± 102
	Range	510 – 1080	430 – 760

since first implant (Median duration 15.7 ± 8.3 months). There were no cases of device migration or failure. Mean R wave sensing was 13.7 ± 5.8 mV. 16 of the 18 patients had a threshold ≤ 1 V. Two patients were noted to have higher thresholds (2.88 mV and 3.25 mV). (Table 2).

Conclusion In our patient cohort, use of Micra™ transcatheter pacemaker insertion was a safe alternative to conventional pacemaker insertion. The minimally invasive implantation was associated with a low acute complication rate and acceptable pacing parameters at follow-up. Longer term follow-up is ongoing.

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SAFETY AND EFFICACY OF 'SAME DAY' ELECTIVE CORONARY ANGIOGRAPHY AND SYNCHRONISED CARDIOVERSION IN PATIENTS WITH ATRIAL FIBRILLATION AND UNINTERRUPTED NOACS

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Background Synchronised cardioversion is an effective means of restoring sinus rhythm in patients suffering from atrial fibrillation either in acute settings or electively after being commenced on appropriate anticoagulation. Coronary artery disease frequently coexists with atrial fibrillation. Patients with atrial fibrillation frequently undergo cardioversion and/or coronary angiography electively, possibly leading to multiple patient admissions. The safety and efficacy of having elective diagnostic coronary angiography along with cardioversion during the indexed admission with uninterrupted NOACs is not well established.

Methods A single centre retrospective analysis was performed on patients who underwent elective diagnostic coronary angiography along with cardioversion on the same day from January 2018 to December 2019. Patients had a 12 lead ECG

done on the day of admission to confirm the presence of atrial fibrillation. Patients were commenced on NOACs for a minimum of four weeks prior to the day of cardioversion. Patients were specifically listed as first case in our elective cardiac catheterization laboratory. Coronary angiography was performed via transradial approach using a 5Fr sheath. Intra-arterial cocktail of Verapamil (2.5 mg) without unfractionated heparin was administered in each case. Hemostasis at the transradial access site was achieved by applying TR band and long protocol (2.5 mls slowly released every 5 mins after four hrs of TR band application, provided there is no bleeding).

Cardioversion was performed under conscious sedation with intravenous diazepam after coronary angiography was performed in the cardiac catheterization laboratory.

Results A total of 26 patients were scheduled for elective coronary angiography and cardioversion on the same day. 2 patients were excluded; patient 1 after omission of repeated doses of NOAC and patient 2 after presence of normal sinus rhythm on admission. A total of 24 patients were eligible for the study. Baseline demographics are provided in table 1. Normal sinus rhythm was restored in 75% of patients (18/24). None of the patients had periprocedural complications during or after coronary angiography or cardioversion.

Abstract 44 Table 1 Baseline demographics of the patient

Characteristics	
Age (Median)	66.5
Male (% of patients)	72 %
Female (% of patients)	28 %
Hypertension	62.5 %
Diabetes	16.6 %
Dyslipidaemia	62.5 %
Smoking history	62.5 %
Previous history of ischemic heart disease	8.3%
Average CHA ₂ DS ₂ VASc score	2.15

Only one patient was re-admitted with symptomatic atrial fibrillation within 30 days requiring repeated cardioversion to establish normal sinus rhythm. 37.5% of patients had concomitant moderate to severe coronary artery disease.

All patients were discharged on the same day from the day ward once the TR band was removed following the long protocol for TR band deflation. None of the patients had any immediate radial artery complication including access site bleeding or radial artery haematoma requiring intervention or represented within 24 to 48 hours with any radial artery access site complications.

Conclusion In patients suffering from atrial fibrillation who have high suspicion of underlying coronary artery disease it is safe to perform coronary angiography and cardioversion on the same day with uninterrupted NOACs.

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A SIMPLE QUESTIONNAIRE-BASED TRIAGE TOOL TO IDENTIFY PATIENTS POTENTIALLY ELIGIBLE FOR REFERRAL TO AN ADVANCED HEART FAILURE CENTRE

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