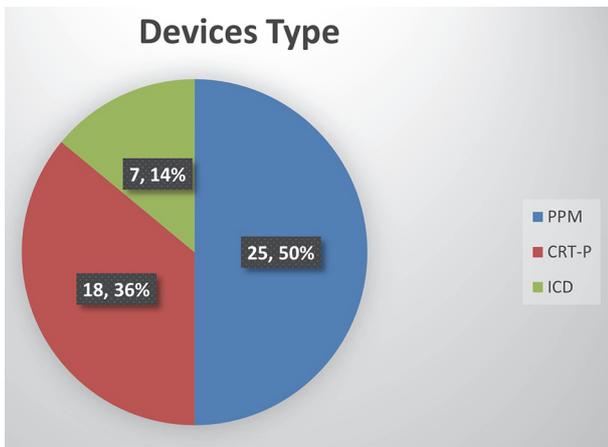


Abstract 102 Figure 1



Abstract 102 Figure 2

Abstract 102 Table 1 RM nominal settings for AHRE alerts between different device manufacturers

	Single Episode (On/Off)	Single Episode Duration	Daily Burden (On/Off)	Daily Burden Duration
Abbott	On	3hr	On	6 hr
Biotronik	N/A	N/A	On	6 hr
Boston Scientific	N/A	N/A	On	0 hr
Medtronic	N/A	N/A	Off	6 hrs

developing AF. It is possible that the 9 patients on OAC may have initiated OAC sooner if significant AHRE been detected earlier. Similarly, limitations of AHRE detection and a failure by physicians to alter RM nominal settings potentially limited identification of other patients suitable for OAC.

**Conclusions** Guideline-directed AHRE detection settings are under-utilised even though most patients with implantable cardiac devices are at potentially high risk of developing thromboembolic events.

**Conflict of Interest** None

103 PAINFUL LEFT BUNDLE BRANCH BLOCK SYNDROME AT REST TREATED WITH HIS-BUNDLE PACING

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**Introduction** Painful left bundle branch block (LBBB) syndrome is a rare condition characterised by chest pain associated with intermittent LBBB, in the absence of significant coronary artery disease. Its prevalence, mechanism and management are not well described in the literature [1]. An ischaemic substrate has been postulated but largely disregarded in favour of a ‘ventricular dyssynchrony’ theory [2]. Nevertheless, most described cases occur on exertion [1], with only a single case of the condition occurring at rest being described [3]. Pacing has been used to successfully treat the condition via a range of modalities, including right ventricular pacing [4], cardiac resynchronisation therapy [4][5] and His-bundle pacing (HBP) [6][7]. We present a further patient who experienced the syndrome at rest, and successfully treated with HBP.

**Case Presentation** A 64 year old lady presented to the emergency department reporting acute onset cardiac sounding chest pain. An ECG revealed evidence of LBBB. Blood tests were performed but the results were not available before further investigations. The patient was immediately taken to the cardiac catheter lab for primary percutaneous coronary intervention. An angiogram revealed no significant coronary artery disease and no percutaneous intervention was performed. A CT-aorta was unremarkable. Her troponin was normal on serial measurements and the remainder of her blood tests were unremarkable. A repeat ECG when she was pain free revealed sinus rhythm with narrow QRS complexes and first degree heart block. An echocardiogram showed normal cardiac structure and function. The patient was moved to the coronary care unit and placed on cardiac monitoring. Over the next 24 hours the nursing staff observed and documented around 20 episodes of LBBB that coincided abruptly with the patient’s reports of chest pain. During periods when her heart rate was less than 60 beats per minute (bpm) she had a narrow QRS interval, but when her heart rate increased to over 60bpm, she developed LBBB. Her chest pain was debilitating and difficult to manage. Her baseline hypotension (90/50) and borderline bradycardia (45-55bpm) limited the use of chronotropic medications.

The diagnosis of painful LBBB syndrome was made and after considering the available literature, the decision was made to offer the patient a DDDR pacemaker with His-bundle pacing, an intervention that has been recognised to offer effective symptomatic relief [6][7]. A DDDR pacemaker with HBP was implanted, achieving non-selective His-bundle pacing. Electrophysiology studies performed at the time revealed a narrow QRS complex at rates less than 60bpm with no chest pain. This was also achieved during non-selective His-bundle pacing at rates greater than 60bpm. However, when AAI pacing was performed at rates above 60bpm, LBBB was induced and the patient complained of chest pain.

The procedure was successful and afforded the patient immediate and persistent relief. She was discharged the next morning and at her one month follow up these positive results persisted. Discussion This case of painful LBBB syndrome is only the second described occurring at rest and offers

further evidence against an ischaemic aetiology. Treatment options for this syndrome include negatively chronotropic medications and patient education to avoid the heart rate exceeding the threshold at which LBBB develops. However, this was not feasible in our case due to a resting bradycardia and the condition occurring at rest. Theoretically, using HBP to correct LBBB appears counterintuitive, as it is pacing proximal to the point of abnormal conduction. Despite this, it has a proven success rate in the treatment of LBBB [8] and does appear to be a management option that can offer a striking resolution of symptoms in select patients with this unusual and still poorly understood condition.

**Conflict of Interest** None

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### REWORKING THE POST-COVID WAITING LIST – THE PATIENT EXPERIENCE OF IMPLANTABLE LOOP RECORDER EXPLANTATION

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**Introduction** The Covid-19 pandemic has put a considerable strain on procedural waiting lists, with the majority of elective outpatient work cancelled during the pandemic. With the vaccination programme and reducing infection levels, attention is turning to addressing these waiting lists. One procedure that was affected was the removal of implantable loop recorders (ILRs). Manufacturers recommend that ILRs are removed at the point of battery depletion (usually 3-4 years), if they have not already been removed due to a positive finding or patient preference. There is little evidence in the literature regarding late complications with ILRs, and we therefore wished to examine what patients' thoughts would be about keeping the ILR in for a longer period of time.

**Methods** Patients awaiting ILR explantation and those who had undergone explantation, were identified. A retrospective review of the notes was used to get demographic and clinical data. Both groups of patients were contacted, and a questionnaire used to gain an understanding of patients' experience and expectations.

**Results** Prior to the Covid-19 pandemic, 60 patients who had undergone ILR explantation were identified. A total of 22 responded to our questionnaire (table 1). The majority (86%) were happy to have their ILR removed, although a smaller majority (59%) would also have been happy to have had the device kept in, were it felt to be safe. Very few patients felt a tangible difference as a result of having the ILR removed (14%) and no patients were worried about the waiting time prior to Covid-19. Of 77 patients currently awaiting explant, 30 responded to our questionnaire (table 1), with 70% not being concerned by the wait for removal. This is likely aided by the fact that 80% of patients had no day to day symptoms as a result of the ILR. Half of the patients however, would be concerned about not having the ILR removed, predominantly due to mild discomfort or concerns regarding the presence of a battery. Across both groups (n=52) only 8 patients were concerned about the risk of coming into the hospital for the procedure, with patients commenting that the stringent regulations that hospitals had employed combined with the vaccination programme, gave them significant confidence in attending for outpatient procedures.

### Abstract 104 Table 1 Summary of characteristics for each group of patients

	Waiting list	Explanted
N	30	22
Male (%)	17 (57%)	10 (45%)
Age/years	56.3 $\pm$ 14.9	60.6 $\pm$ 16.3
Average duration of ILR / years	4.3 $\pm$ 1.53	2.1 $\pm$ 1.28
Average wait from time of listing / years	1.21 $\pm$ 0.40	-
<i>Indication for ILR implant</i>		
Arrhythmia (%)	4 (13%)	6 (27%)
Stroke (%)	10 (33%)	9 (41%)
Syncope (%)	16 (53%)	7 (32%)
<i>Indication for ILR explant</i>		
Battery deplete (%)	16 (53%)	3 (14%)
Arrhythmia detected (%)	4 (13%)	10 (45%)

### Abstract 104 Table 2 Summary of questionnaire responses

Was the patient concerned about the waiting time?	9 (30%)	0 (0%)
Did the ILR result in a day to day on the patient?	6 (20%)	-
Did the explant lead to a tangible change for the patient?	-	3 (14%)
Would the patient be happy to keep the ILR in?	15 (50%)	13 (59%)
If not happy, is this due to discomfort?	7	2
If not happy, is this due to concerns about the device/battery itself?	4	0
Was the patient concerned about attending hospital due to the pandemic/lockdown?	1 (3%)	7 (32%)

**Conclusions** This study found that if patients are reassured about the safety of keeping an implantable loop recorder in, and do not suffer any discomfort or symptoms as a result of the device, they are happy both to wait longer for device removal, or even not have it removed at all. In the context of the current pandemic, more thought should perhaps be given to patient guided removal times, especially in cases of removals performed for battery depletion.

**Conflict of Interest** Nil

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### EVALUATING LONG TERM PERFORMANCE OF MICRA VA LEADLESS PACEMAKER

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**Background** The Micra VA (leadless) pacemaker was approved by the FDA for use in 2016. Whilst initial studies evaluated the safety and efficacy of the device for a mean follow up of 12 months, very few studies have evaluated complications and device function beyond 1 year. **Objective:** To evaluate the short and long term complication rate and device function associated with the Micra VA (leadless) pacemaker at our centre.