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atrium, and overscrewing of the lead helix seem to be the best ways of prevention.

Disclosure of interest  The authors declare that they have no competing interest.

https://doi.org/10.1016/j.acvdsp.2021.09.177

383  Relationships between left ventricular mass and QRS duration in diverse types of left ventricular hypertrophy: A novel diagnosis clue  
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Introduction  Hypertrophic cardiomyopathy (HCM) may be associated with very narrow QRS while left ventricular hypertrophy (LVH) may increase QRS duration. We investigated the relationship between QRS duration and LV mass in subtypes of abnormal LV wall thickness.  

Methods  Four groups of patients from Toulouse and Bordeaux University Hospitals were retrospectively included, with HCM, LVNC, LVH and controls with healthy hearts. Automatic measurement of LVM on MRI was correlated to automatic measurement of QRS duration on ECG. Uni- and multivariate analysis were performed between groups including explanatory variables expected to influence LVM and QRS duration. The relationships between QRS duration and LVM was further studied within each group.  

Results  In total, 221 HCM, 28 LVNC, 16 LVH and 40 controls were analyzed the results of 24 hours recording as well as echocardiography [TR stage 1/2: 132 (89%) vs. 110 (79%); P < 0.01]. QRS duration, LVM, hypertension, maximal wall thickness and LGE were significantly associated with very narrow QRS while left ventricular hypertrophy (LVH) may increase QRS duration. We investigated the relationship between QRS duration and LV mass in subtypes of abnormal LV wall thickness.

Conclusion  The same finding is reported for Global RV Strain (< 0.001), mean LVEF was 56% ± 15.6. TAPSE, RV S’ (12.1 ± 2.8 vs. 11.2 ± 2.8 cm/s; P < 0.001) and tissue Doppler on lateral tricuspid annular (RV S’) (12.1 ± 2.8 vs. 11.2 ± 2.8 cm/s; P < 0.001) measured before and immediately after implantation show a significant decrease in RV function. The same finding is reported for Global RV Strain (-20 ± 0.6 vs. -18 ± 0.5%; P < 0.01) and RV free wall strain (-25 ± 0.7 vs. -23 ± 0.6%; P < 0.01).

TR after CIED implantation is more severe in comparison with basal echography [TR stage 1/2: 132 (89%) vs. 110 (79%); P < 0.01] (Fig. 1).

Conclusion  Permanent RV pacing immediately decrease RV systolic function assessed traditional echocardiographic parameters and RV strain. TR also gets worsened.

Fig. 1 Impact of right ventricular (RV) pacing on RV free wall strain.

Disclosure of interest  The authors declare that they have no competing interest.

https://doi.org/10.1016/j.acvdsp.2021.09.179

406  Acute right systolic ventricular dysfunction in permanent cardiac pacing. Insight from RV PACE trial (Right Ventricular Function assessment in Permanent Cardiac paciing by Echography)  
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Introduction  Permanent right ventricular (RV) pacing is now clearly linked to heart failure and decrease in LVEF, in non neglected proportion. Several trials and observations reported the worse impact of this heart pacing mode on left ventricular functions, but rare are those that studied RV systolic function.  

Purpose  In this observational prospective trial, we evaluate echographic systolic RV function, before and immediately after cardiovascular implantable electronic device (CIED) implantation and at 6 months of follow-up.  

In this intermediate analysis, we report impact of RV pacing on systolic RV function.  

Methods  Between February 2020 and February 2021, we enrolled 174 [114 (65%) male, 38 (21%) with AF] consecutive patients underwent RV permanent pacing (CRT, Hisian and left bundle branch pacing excluded) in prospective study for evaluation of echographic parameters of RV systolic function (TAPSE, RV S’, RV global longitudinal strain and RV free wall strain) and severity of tricuspid regurgitation (TR).  

Transthoracic echography (TTE) was performed (by 3 physicians) at baseline (just before procedure) and immediately after implantation.  

Outcomes  At baseline, mean LVEF was 56% ± 15.6. TAPSE (22.8 ± 6.29 vs. 19.3 ± 5.47 mm; P < 0.001) and tissue Doppler on lateral tricuspid annular (RV S’) (12.1 ± 2.8 vs. 11.2 ± 2.8 cm/s; P < 0.001) measured before and immediately after implantation show a significant decrease in RV function. The same finding is reported for Global RV Strain (-20 ± 0.6 vs. -18 ± 0.5%; P < 0.01) and RV free wall strain (-25 ± 0.7 vs. -23 ± 0.6%; P < 0.01).

Conclusion  Permanent RV pacing immediately decrease RV systolic function assessed traditional echocardiographic parameters and RV strain. TR also gets worsened.

Disclosure of interest  The authors declare that they have no competing interest.

https://doi.org/10.1016/j.acvdsp.2021.09.179

357  The long COVID: Findings of 24 rhythmic Holter in patients suffering from palpitations  
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Introduction  Many patients showed long COVID syndrome after recovery from the CORONAVIRUS — SARS infection (40—50%). Many patients showed palpitations and we do not know the cause of these palpitations.

Patients and methods  This is an observational study including patients showing palpitations after recovery from the COVID-19. We analyzed the results of 24 hours recording as well as echocardiographic findings and we analysed the correlation between myocardial strain and rhythms disorders.
Results Among 2338 COVID-19 patients, 45% showed long COVID symptoms at 30 days, 7% patients suffered from palpitations. We noted an inappropriate sinus tachycardia in 60% of cases, 3 cases of ventricle disorders arrhythmia disorders. Longitudinal strain was significantly lower in patients who showed arrhythmia in the 24 recordings than in patients with normal 24 hours rhythm recordings. Conclusion There is correlation between rhythm disorders and myocardial damages in patients who showed COVID-19.

Disclosure of interest The authors have not supplied their declaration of competing interest.

https://doi.org/10.1016/j.acvdsp.2021.09.180

304 Evaluation of the use and applicability of the ESC 2018 recommendations on risk stratification of syncope in the emergency department

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Introduction Complications related to syncope vary according to its etiology, which remains undetermined in approximately 20% of cases. The use of a risk stratification and patient referral protocol, such as the one proposed in the ESC 2018 recommendations, could be a solution to improve the management of syncope.

Purpose To evaluate the use of syncope risk stratification protocols in an emergency department. The secondary objective is to evaluate the applicability of the ESC recommendations and their ability to stratify the risk of complications after an episode of syncope.

Methods Observational, retrospective, monocentric study conducted in the emergency department of the university hospital of Brest during February 2018 for the reasons “discomfort with or without loss of consciousness“, “chest pain“, “tachycardia“, “bradycardia“, and “suspected pulmonary embolism“. Patients who presented with a real episode of syncope or presyncope were classified into three risk groups (low, intermediate and high) according to the ESC recommendations.

Results In total, 436 patients met the initial search criteria, of which 100 were included. No records mentioned the use of a risk stratification protocol. ESC recommendations were applicable to 87% of the records. Thirty-one percent of patients were classified into three risk groups (low, intermediate and high) accordingly to the ESC recommendations.

Results In total, 436 patients met the initial search criteria, of which 100 were included. No records mentioned the use of a risk stratification protocol. ESC recommendations were applicable to 87% of the records. Thirty-one percent of patients were classified into three risk groups (low, intermediate and high) accordingly to the ESC recommendations.

Conclusion The ESC recommendations were applicable to 100 were included. No records mentioned the use of a risk stratification protocol. ESC recommendations were applicable to 87% of the records. Thirty-one percent of patients were classified into three risk groups (low, intermediate and high) accordingly to the ESC recommendations.

Disclosure of interest The authors have not supplied their declaration of competing interest.

https://doi.org/10.1016/j.acvdsp.2021.09.181

206 Infective endocarditis in cardiac implantable electronic devices (pacemakers): Experience of the rhythmology department in Mohammed V military instruction hospital

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Introduction Infective endocarditis (IE) remains a highly mortal disease, yet the diagnosis often is missed or made only late in the disease course. Its development on cardiac implantable electronic devices (CIEDs), such as a pacemakers, may be difficult to treat without explanting the cardiac stimulation system.

Purpose Our objective is to study the frequency of infective endocarditis (IE) on cardiac implantable electronic devices (CIEDs), and to determine the predisposing factors in order to prevent them.

Patients and methods We conducted a retrospective and descriptive study of patients who received CIEDs implantation in the rhythmology department of Mohammed V military instruction hospital in Rabat from February 2013 to January 2017. We included patients who experienced endocarditis on these devices. We collected data regarding the indication, the implantation procedure, and the diagnostic, therapeutic and progression characteristics of this endocarditis.

Results Of the 395 patients implanted, twelve (3%) had an IE. The infection concerned ten patients with primary implantation and two patients after generator replacement. Eight patients (67%) were male, the mean age was 66 years and three patients had a type 2 diabetes (17%). Local inflammatory signs were the most frequent evocative symptom in our series, they were observed in seven patients (60%). Biological assessment and blood cultures were conclusive in only half of the cases. Extraction of infected material was performed by traction in ten patients and by laser extraction in the other two (Fig. 1).

Fig. 1 Representation of the number of complications, deaths, and rehospitalizations in the three groups at 1 year after the syncopeal event.

Fig. 1 Images showing an EXCIMER laser extraction in a patient with infective endocarditis.