Materials and methods

This was a prospective study on atrial fibrillation patients at Hospital Sultanah Bahiyah from January 2016 till June 2021. Inclusions criteria included age more than18 years old, documented electrocardiogram (ECG) of AF and underwent cryoablation procedure successfully. Baseline demographic details, cryoablation procedure data such as temperature, Time-To-Isolation (TTI) and complication were obtained. Subsequently, patients were reviewed at 3 and 6 months for symptoms and ECG.

Results

A total of 41 patients were included with 58.5% of them were male ($n = 24$) and median age of 63 years (IQR 54–71). Malay represented the most with 43.9% ($n = 18$) followed by Chinese 26.8% ($n = 11$) and Indian 19.5% ($n = 8$). In term of diagnosis, most of them were paroxysmal, 41.5% ($n = 17$) and long persistent with 46.3% ($n = 19$). In addition, mean CHA2DS2-VASc score was 2.56 and most of them had hypertension (65.9%), dyslipidaemia (58.5) and interestingly 19.5% of them had implanted cardiac devices. For total procedure time, shorter duration was recorded for fluoroscopy guided transseptal puncture compared to TOE guided transseptal puncture (median 150 min, IQR 75–240 vs median 232 min, IQR 175–420, $p < 0.01$). Median TTI for Left Superior Pulmonary Vein, Left Inferior Pulmonary Vein, Right Superior Pulmonary Vein and Right Inferior Pulmonary Vein were 50 s, 46 s, 45 s and 64 s respectively. Moreover, rate of recurrence was reported at 24.4% ($n = 10$) with complication rate of 7.3% ($n = 3$), mainly from puncture site hematoma.

Conclusions

Cryoablation was relatively a safe procedure with minimal complications. Even though our recurrence rate was around 25%, the percentage was in concordance worldwide and often due to various factors including non PV triggers.

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37.

Utility of dutch lipid clinic network score to estimate prevalence of familial hypercholestrolemia in patients with ST-elevation myocardial infarction

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Background

Familial hypercholesterolaemia (FH) is underdiagnosed globally, and in Malaysia. FH is associated with elevated levels of low-density lipoproteins (LDL-C), and predisposes an individual to premature cardiovascular disease, including the life threatening clinical manifestations such as acute ST-elevation myocardial infarction (STEMI). Patients admitted with STEMI in Malaysia are comparatively younger than those admitted in developed countries. The Dutch Lipid Clinic Network (DLCN) criteria has been proposed to identify patients with FH, and community data in the Malaysian population has been published.

Objective

To estimate prevalence of FH in a cohort of patients with STEMI admitted to a tertiary Cardiology centre using the DLCN criteria.

Materials and methods

Consecutive patients admitted with Type-1 STEMI between 1 April 2021 to 30 June 2021 were enrolled in this retrospective study. Patients previously prescribed LDL-lowering drugs were excluded. Clinical and laboratory data, including the admission fasting lipid profile, were obtained, and the DLCN scores calculated. Patients were then classified to Definite FH, Probable FH, Possible FH, and Unlikely FH.

Results

49 patients were enrolled into this study. The mean age was 52.7 ± SD years, 83.7% were male. The mean Total cholesterol level was 5.13 ± 1.27 mmol/l and the mean LDL-C levels were 3.38 ± 1.17 mmol/l. Using the DLCN scores, 0% were classified as Definite FH, 2.1% as Probable FH, 42.8% as Possible FH and 55.1% as unlikely FH. The mean age of those with Probable and Possible FH combined was 48.0 ± 11.1, and those Unlikely FH 56.04 ± 9.47 ($p = 0.01$). The mean LDL-C levels of those with Probable and Possible FH combined was 3.88 ± 1.22 mmol/l, and those Unlikely FH 2.98 ± 0.97 mmol/l ($p = 0.007$).

Conclusions

DLCN score estimated 45% of patients admitted with STEMI had probable or possible FH, but none classified as definite FH. Unsurprisingly, this is five times higher than what was observed in the Malaysian population. As molecular diagnostics was currently not applied in our cohort, it is possible the that FH is underdiagnosed in our cohort. Therefore, strategies to improve control of hypercholesterolaemia in Malaysia and identification of those highest risk developing premature STEMI are warranted.

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38.

Impact of 2016 ASE/EACVI recommendations on evaluation of left ventricular diastolic function and predicting cardiovascular outcomes in patients with diabetes and hypertension without prior adverse cardiac events

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Background

Left ventricular diastolic dysfunction (LVDD) has been shown to be more prevalent in patients with diabetes, and once progress to overt heart failure, carry worse clinical outcomes, compared to those without diabetes. The complexity of previous 2009 ASE/EACVI algorithms makes diastolic function (DF) assessment challenging. Hence, prognostic value of LVDD estimates in clinical setting is not well-established.

Objective

To evaluate the impact of 2016 recommendations in estimates of LVDD and predicting cardiovascular outcomes in patients with diabetes and hypertension.

Materials and methods

A total of 111 patients with diabetes and hypertension who attended diabetic clinic follow-up at the primary healthcare settings