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 transluminal approach using a 5Fr sheath. Intracoronary cocktail of Verapamil (2.5 mg) without unfractionated heparin was administered in each case. Hemostasis at the transluminal 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.

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.

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

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Background The evaluation of patients with heart failure is time-consuming and requires careful clinical judgement. A simple, validated questionnaire-based triage tool could provide a useful adjunct to clinical assessment and facilitate efficient referral to a cardiothoracic surgical centre.

Methods We developed a 10-item questionnaire covering well-established predictors of adverse events in heart failure (Table 1). The tool aims to identify patients at risk of being considered inappropriate for referral due to high complexity or comorbidity. We used logistic regression to derive a risk score and evaluated the tool’s performance using area under the receiver operating characteristic (AUC) curve.

Results The questionnaire was completed in 385 patients referred to our centre. The AUC of the risk score was 0.72 (95% CI 0.66–0.78). Patients with a score >3 were 2.03 times more likely (95% CI 1.45–2.84) to be considered inappropriate for referral.

Conclusion This questionnaire-based tool may improve the efficiency of referral to specialist heart failure care.

References 1. Murphy L, Giblin G, Caples N, Black R, O’Neill J, Hailey C, Mahon N, McDonald K, Joyce E. Mater Misericordiae University Hospital, Dublin, Ireland; Waterford University Hospital, Waterford, Ireland; Heart Failure National Clinical Programme, HSE, Ireland; St. Vincent’s University Hospital, Dublin, Ireland; STOP-HF Unit, St. Vincent’s University Hospital, Dublin, Ireland.
Introduction
Accurate prevalence data for advanced heart failure (HF), reported to range between 2–10% of the chronic HF population, are lacking. Determining the proportion of patients potentially suitable for referral to a specialist advanced HF center is crucial for accurate service planning and resource provision, particularly in the evolving era of durable mechanical circulatory support.

Purpose
To identify the population of patients potentially eligible for referral for advanced surgical therapies to the National Advanced HF and Cardiac Transplant center, using a quick one-page prospective survey.

Methods
A survey comprising 13 potential markers of advanced HF was developed, modified from the 2018 position statement of the Heart Failure Association of the European Society of Cardiology. This was distributed to 26 HF clinic centers nationally. Each center was asked to complete the survey on consecutive patients over a 3-month period who fulfilled the following three criteria: 1) age < 65 years; 2) ejection fraction (EF) < 40% and 3) HF of >3 months duration.

Results
In all, 21 of 26 HF clinic centers participated in the survey. Across the period of inclusion, 4950 all-comer HF patients were seen in 21 centers. Of these, 375 fulfilled the inclusion criteria, comprising 279 (74.4%) males with a median age of 57 years. In total, 246 (66%) of the completed surveys had one or more potential markers for advanced HF, representing just under 5% of the total all-comer HF population seen across the same time period. Of these, 67 patients (27%) had at least two, 48 (20%) had three and 40 (16%) had 4 potential markers. The most frequently noted markers were hospitalization or unscheduled clinic review (56%), intolerance to renin-angiotensin-aldosterone system inhibitors due to hypotension or renal dysfunction (29%) and intolerance to beta-blockers due to hypotension (27%). Almost one-quarter of patients reported NYHA Class III or IV symptoms (figure 1).

Conclusions
In this index prospective National survey, approximately 5% of an all-comer routine HF clinic population and two-thirds of a pre-selected HF with reduced EF <65 years cohort, were found to have at least one clinical or biochemical marker suggesting advanced or impending advanced HF. Notably, almost one-quarter of patients in this chronic outpatient ‘snapshot’ population have advanced HF symptoms. This simple one-page triage tool may be useful to identify a population potentially eligible for referral to an advanced HF center for assessment for advanced surgical therapies, thereby aiding resource utilization and service planning.

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Purpose
To identify the demographics and outcomes of patients referred to the National Advanced HF and Cardiac Transplant centre, including identifiable markers of advanced HF according to the Heart Failure Association of the European Society of Cardiology (ESC) 2018 position statement.

Methods
Consecutive patients referred to the national advanced HF clinic over a 9-month period from May 2019 to February 2020 were prospectively included in this registry. Baseline demographics, laboratory, electrocardiogram, echocardiogram parameters were recorded. Markers for advanced HF according to the ESC 2018 ‘I NEED HELP’ criteria (table 1) were documented for each patient. Outcomes including need for admission from outpatient clinic, requirement for inotropes or subsequent MCS and/or heart transplantation and mortality were recorded.

Results
A total of 32 patients were enrolled (28% female, mean age: 49 ± 12 years, 50% NYHA III or IV) over the 9-month period. The vast majority (81%, n=25) had at least one HF hospitalization in the preceding year, with 25% (n=8) having ≥ 2. Frequency of markers of advanced HF,