Conclusions IVF may be diagnosed prematurely which can result in a failure to screen family for inherited causes of VF. Appropriate therapy is common in these patients and there is a high prevalence of ER but because of its frequency in the general population this is not a useful screening marker.

PATIENTS WITH 'IDIOPATHIC' VENTRICULAR FIBRILLATION AND AN ICD

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Introduction Idiopathic VF (IVF) maybe over diagnosed depending on which definition is used. The aim of this study was to investigate the incidence of IVF and the frequency with which patients are inappropriately labelled with IVF in a tertiary centre with a specialist inherited arrhythmia clinic.

Methods Medical notes were retrospectively reviewed on all patients who had an ICD inserted between June 1994 and May 2012. All patients who had undergone a secondary prevention ICD for either 'unknown' or 'idiopathic' reasons selected. The electronic records and medical notes were reviewed to reveal whether in light of further testing a different diagnosis was given. IVF was defined as VF with no identifiable cause after full clinical investigation which included ECG, signal-averaged ECG, echo, exercise test (if physically able), ajmaline test, coronary angiogram and cardiac MRI.

Results Of 2189 patients, 135 had a working diagnosis of IVE Of these seven had limited clinical data and were excluded. Of the remaining 128 patients (98 M), only 28 (22%) had a confirmed diagnosis of IVE 15 patients (12%) required further testing before all causes could be excluded resulting in a diagnosis of IVF (9 need an exercise test and 12 need an ajmaline test). The remaining 85 patients were found to have DCM or IHD 72 (56%), HCM 3 (2%), ARVC 4 (3%), LQTS 2 (1.5%), Brugada 2 (1.5%), 1 with cardiac sarcoidosis and 1 with Wolff Parkinson White syndrome. Of the 28 patients with confirmed IVF (mean age 43±13) and follow up ranging from 2–216 months, 16 (57%) had evidence of early repolarization (ER) on their ECG (J point notching/slurring in ≥2 leads). 8/28 (28%) IVF patients had at least 1 appropriate therapy during follow up and 1 patient required catheter ablation for recurrent VE

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