

number of outpatient clinic appointments being avoided at a cost saving to the CCG.

Conflict of Interest None

38 EFFICACY OF DC CARADIOVERSION FOR ATRIAL FIBRILLATION: A LARGE RETROSPECTIVE OBSERVATIONAL STUDY

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Introduction The evidence base for rhythm control strategies in atrial fibrillation (AF) remain contentious. Synchronised DC cardioversion (DCCV) is a simple and accessible treatment option in many centres. However, there is little data to support its use as a long-term strategy or data regarding which groups benefit most from this strategy.

Methods We collected AF cardioversion cases across a six-year period at a busy district general hospital with a nurse-led cardioversion service. Demographic, echocardiographic and procedural data were collected, as were safety and AF outcomes at 6 and 12 months. Patients with incomplete data were excluded from the analysis. Statistical analysis was undertaken using the Fischer’s exact T-test.

Results 550 cardioversion cases were included in the analysis with a median age of 67 (range 28–95). 163 (30%) of patients were obese (BMI 30). The mean CHA2DS2-VASc was 2.3. 342 (62%) of DCCV were for persistent AF, the remainder (208; 38%) longstanding (AF duration >1 year) persistent. 162 (29%) had an unknown duration of AF due to an incidental diagnosis. 483 (88%) were on AV-nodal blocking and 103 (19%) on anti-arrhythmic medication (flecainide, sotalol or amiodarone). 516 (94%) of DCCVs were acutely successful with a complication rate of 2% (n=13), most commonly symptomatic bradycardia requiring temporary transcutaneous (n=2) or percussion pacing (n=6) with no acute strokes. At 1 year 5 (0.9%) had had a stroke/transient ischaemic attack and 9 (1.6%) died. 179/478 (37%) of patients were free from AF at 6 months, with 100/412 (24%) free from AF at 1 year. 89 (16%) of patients were referred for further cardioversion and 144 (26%) referred for catheter ablation. There was no statistically significant effect of patient age, obesity, left ventricular (LV) impairment, or left atrial (LA) dilatation on 6-month outcomes. However, AF duration <1 year did correlate with statistically significant improvement in 6 month freedom from AF (41% vs 31%, p=0.03). In those with moderate/severe LV impairment, anti-arrhythmic use significantly improved 6-month outcomes (70% vs 40%, p=0.01). However, no such effect was seen between moderate/severely dilated and non-dilated LA.

Conclusion DCCV for AF remains a safe procedure with good acute success rates. However, within 6 months the majority of patients will have reverted to AF. AF duration of less than 1 year is associated with an improved 6-month success rate, as does antiarrhythmic use in those with impaired LV function. In selected patients, DCCV remains a useful tool as a ‘trial of sinus rhythm’ to establish potential symptomatic benefits from pursuing a rhythm control strategy.

Conflict of Interest Nil

39 INVESTIGATION OF INTERMITTENT PALPITATIONS WITH THE MICOR ECG WRISTBAND

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Background Palpitations are a leading cause of referral to cardiology services. The diagnosis of arrhythmia is achieved through establishing a symptom-rhythm correlation. Conventional ambulatory ECG monitoring can fail to capture symptomatic events.

Objective The ECG wristband is a wearable patient-activated lead I ECG recorder (30 seconds per event) permitting long-term monitoring and might offer a useful strategy for the initial investigation of palpitations.

Methods Patients referred to our service for investigation of paroxysmal arrhythmia were considered suitable for use of the MiCor device if they reported palpitations (or arrhythmic symptoms e.g. dizzy spells). Patients with symptoms of syncope or inability to use the device were excluded. Patients were



Abstract 39 Figure 1 Micor A100 wristband

Abstract 39 Table 1 Symptom-rhythm correlation
37/38 patients with symptom-rhythm correlation

