## 91 ABSTRACT WITHDRAWN

92 NEGATIVE IMPACT OF SOCIOECONOMIC DEPRVATION
ON CLINICAL OUTCOMES AFTER CRYOABLATION FOR
ATRIAL FIBRILLATION - 18-MONTH STUDY

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Background Socioeconomic deprivation has previously been demonstrated to result in worse heart failure and myocardial infarction outcomes. Lower socioeconomic status has also been shown in published studies to associate with higher incidence of atrial fibrillation (AF), increased mortality and morbidity. However, the impact of socioeconomic deprivation on clinical outcomes post AF cryoablation has yet to be investigated.

Aim To assess the impact of socioeconomic deprivation (as categorised by Scottish Index of Multiple Deprivation, SIMD) on the medical management and clinical outcomes of patients with AF treated by cryoablation.

Methods A retrospective study of paroxysmal or persistent AF patients after cryoablation at Golden Jubilee National Hospital. The parameters included basic demographics, weight, past medical history (inclusive of hypertension, heart failure, type 2 diabetes, stroke or transient ischaemic attacks, prior myocardial infarction, obstructive sleep apnoea) and alcohol misuse. Medical treatment post AF ablation (Beta blocker, non-dihydropyridine calcium channel blocker, flecainide, amiodarone, dronaderone, sotolol, anticoagulant use) were also recorded. Individual's socioeconomic deprivation index, as described SIMD was also recorded (1 - most deprived and 10 - least deprived), and accordingly placed into quintile (SIMD 1-2,3-4,5-6,7-8, 9-10). Follow-up for 18 months. Clinical outcome assessed was rate of readmission for symptomatic documented AF, rate of heart failure admission, stroke, bleeding diathesis and all-cause mortality.

Results 383 patients were identified: 78 from the lowest quintile (SIMD 1-2), 68 from SIMD 3-4, 64 from SIMD 5-6, 62 from SIMD 7-8, and 111 from the highest quintile (SIMD 9-10). No statistical difference exists between age, gender or weight. Lowest socioeconomic quintile has higher incidence of heart failure (p =0.006) and hypertension (p =0.005) but other past medical history was no different. No difference in incidence of alcohol misuse.

Prescription of beta blocker, calcium channel blockers, various classes of antiarrhythmic agents and anticoagulant use post ablation was not statistically different between all groups.

Echo features inclusive of proportion with impaired left ventricular systolic function, left atrial dilatation and significant valvular dysfunction were not statistically different between all groups.

Time from first diagnosis of AF to AF ablation and proportion of persistent AF undertaking AF ablation were not different statistically between all groups.

18 months follow-up demonstrated that both readmission for symptomatic documented AF and recurrence of symptoms at 18 months was statistically higher among patients of lowest socioeconomic quintile (Keplan Meier plot, p=0.014 and p=0.006 respectively). Stepwise multiple regression analysis

also confirmed multiple socioeconomic deprivation as an independent predictor for more adverse clinical outcome (p = 0.02).

Risk of symptom recurrence at 18 months in patients from the least deprived background is less than one third as compared to the ones from the most deprived background (Oddratio 0.32 (0.17 - 0.59)) Risk of readmission for AF in patients from the wealthiest socioeconomic group is also less than a third as compared to those of most deprived social group (Odd-ratio 0.31 (95% CI 0.15-0.61)).

Other clinical outcomes including risk of admissions for heart failure, stroke, bleeding diathesis and all-cause mortality was not statistically different across all groups. Summary: After cryoablation for AF, patients from the lower socioeconomic group are still more likely to experience symptoms recurrence and readmission for symptomatic AF at both 12 months and 18 months follow-up.

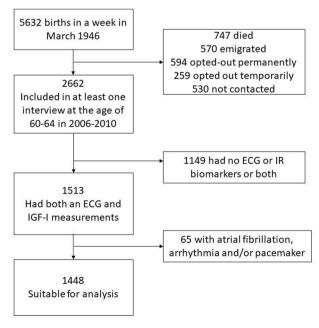
Conflict of Interest None

## 93 INSULIN RESISTANCE IS ASSOCIATED WITH QT PROLONGATION IN THE 1946 BRITISH BIRTH COHORT

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Background Diabetic patients are at increased risk of sudden cardiac death and an association with prolonged heart rate-corrected QT interval (QTc) has been demonstrated. However, the relationship of QTc with circulating blood markers of insulin resistance in the general population is not well understood. The aim of this study was to examine the association between blood biomarkers and QTc interval of insulin resistance in an older age, population-based cohort.



Abstract 93 Figure 1

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