required to achieve block. Acute procedural success was 100% in all groups, and there were no acute complications.

Breakthrough was identified in 50% of CF and LI cases (5 patients in each group). With LI, there was one case of epicardial-endocardial breakthrough (EEB) 11mm from the CTI (figures A, B), three posterior, and one anterior aspect of the CTI, identified with UHDm. Subsequent LI-guided RFA resulted in block, on average six minutes quicker vs CF.

Discussion This data illustrates that UHDm and LI-guided RFA significantly reduces the amount of ablation required (by 47% and 45% versus conventional and CF respectively; p=sig) by shortening lesion duration guided by LI change. A reduction from first RFA to block is also seen (47% and 30% respectively; p=ns). Many patients require further ablation following the initial RFA line, resulting in longer procedures. UHD mapping quickly and accurately identifies breakthrough for further focused RFA, including EEB away from the CTI which may otherwise be difficult to identify and treat using the conventional or standard 3D mapping, and result in prolonged procedure time and/or increased radiation exposure. LI also resulted in more predictable procedure times. We could not directly compare overall procedure times as many in the CF group had CTI combined with left atrial ablation.

Conclusion . LI-guided ablation is safe and effective, and has shown favourable ablation metrics when compared with conventional and CF-guided ablation for CTI dependent AFL. Ultra-high density mapping more rapidly and effectively identifies sites of breakthrough after initial RFA application. A larger study is planned to provide more insight.

Conflict of Interest None

67 IMPACT OF WEIGHT REDUCTION ON ABLATION OUTCOMES IN OBESE PATIENTS WITH ATRIAL FIBRILLATION

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Introduction Obesity can adversely impact efficacy and safety of AF ablation. NHS England have recently proposed restricting ablation in obese AF patients to those who demonstrate >10% reduction in body weight. The feasibility of this degree of weight reduction in a tertiary NHS AF clinic, and its impact on efficacy and safety of AF ablation has not been reported.

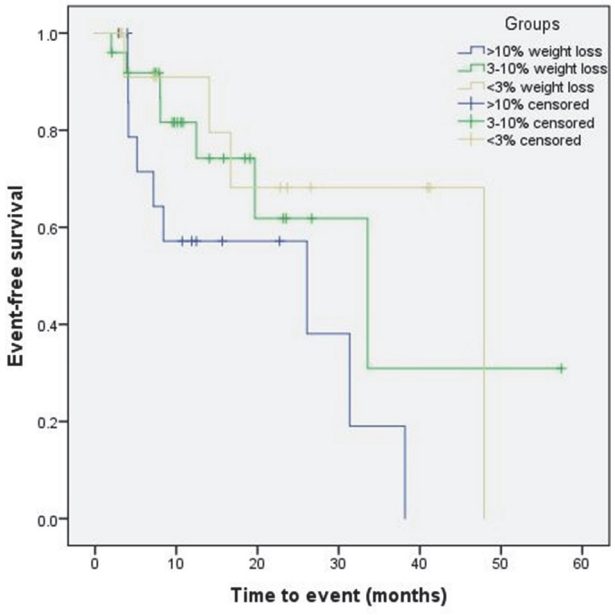
Methods Consecutive AF patients with BMI>30 seen in an arrhythmia clinic were given advice to follow the 5:2 diet while on the waiting list for AF ablation. The diet involved calorie restriction to <600kCal/ day for 2 days a week, with no restrictions on the other 5 days. Patients were asked to maintain a daily weight diary. The outcomes assessed were weight loss achieved, and the recurrence of AF or atrial tachycardia following ablation.

Results 58 patients (mean age was 65.2 [±9.7] years, 50% males, 64% persistent AF) with a mean baseline weight of 109.1 (±16.8) kgs, BMI of 36.7 (±4.1) were prescribed the 5:2 diet. Following a median of 5.3 (IQR 1.7-15.1) months, a mean weight loss of 8.1 (±7.5) kg was observed prior to AF ablation, p<0.001 compared to baseline. Weight loss of >10%, 3-10% and <3% was observed in 16 (27.6%), 26 (44.8%), and 16 (27.6%) patients respectively, with weight loss of 17.9± 5.4 kgs, 6.8 ± 1.9 kgs, and 0.4 ± 2.8 kgs (P<0.001). Two procedural complications (pulmonary oedema) occurred in the entire cohort - both in group 3 (P=0.15). Over a mean follow up period of 17.3 (±13.7) months, 38/58 (65.3%) were free of AF/AT recurrence; no differences were observed between the groups, p=0.095 (Figure 1).

Abstract 67 Table 1 Demographics

	>10% wt loss (n=16)	3-10% wt loss (n=26)	<3% wt loss (n=16)
Age ± SD (years)	66 ± 8	66 ± 8	63 ± 13
Baseline BMI	39.0 ± 4.8	35.6 ± 3.3	36.2 ± 4.1
Ablation BMI	33.0 ± 3.9	33.3 ± 3.1	36.1 ± 4.8
Baseline body weight, kgs	110.6 ± 15.3	104.7 ± 16.6	114.7 ± 17.7
Weight loss, kgs	17.9 ± 5.4	6.8 ± 1.9	0.4 ± 2.8
Hypertension (%)	37.5	50.0	43.8
Diabetes mellitus (%)	12.5	11.5	18.8
Obstructive sleep apnoea (%)	12.5	7.7	0
LV ejection fraction ± SD (%)	52.5 ± 5.0	53.6 ± 4.3	49.9 ± 8.0
LA size ± SD (mm)	44 ± 6	40 ± 4	42 ± 6
Persistent AF (%)	81.2	54.8	56.2
Freedom from AF/AT (%)	43.7	72.0	75.0

AF, atrial fibrillation; AT, atrial tachycardia; BMI, body mass index; LA, left atrial; LV, left ventricle; SD, standard deviation



Abstract 67 Figure 1

Conclusions Weight loss of >3% body weight can be achieved in the majority of patients seen in a tertiary AF clinic with a simple dietary advice, although weight reduction of greater than 10% is seen in only a minority. Modern AF ablation practice results in encouraging procedural safety as well as medium-term arrhythmia free survival rates in this traditionally difficult population, with no influence observed in our cohort of significant weight reduction. Whether this is because of advanced arrhythmia substrate by the time patients are referred for ablation is unclear.

Conflict of Interest None