and 35 women) were included in the final analysis. Given the setting of unselected intake, there was significant heterogeneity in the weights of the cohort assessed, with inclusion of patients with low and very elevated BMIs. The BMI spread from the cohort is displayed in figure 1.

We considered a patient’s weight to have been addressed by the primary medical team if an overweight or obese status was discussed with the patient and/or documented in the admission note. 10 out of 39 patients who were overweight or obese had this documented in their admission note (26%). No patient had their BMI measured independent of a nutritionist’s input. Referral to dietetics was made in 75% of underweight patients, 33% of overweight patients, 11% of patients with class I obesity, 66% of those with class II obesity and 66% of those with class III obesity. 4% of patients had weight loss proposed in their management plan. Hypertension was a comorbidity in 50% of patients, with 34% of patients having a diagnosis of dyslipidaemia. Musculoskeletal disease was present in 26%, most commonly in the form of gout. Documentation of a patient’s weight is standard practice during a modern day hospital admission, mainly due to the necessity for weight-based medication dosing and accurate assessment of renal function. However, as it stands it is not the routine to calculate the body mass index during these same admissions. Nonetheless, calculation of the BMI represents the prerequisite to identifying and advocating for patients who are overweight and obese. We argue that it would be optimal for all admitted patients to have their height and weight measured during their admission, with subsequent calculation of the BMI. With an electronic patient record (due to be initiated in all public hospitals in Ireland in the coming years), the BMI could be published on patients’ home page. We feel that this would act as an impetus to discussion and management of an often under-acknowledged comorbidity.

**Background** Obesity is associated with many factors that predispose to cardiovascular disease, including hypertension, dyslipidaemia, and diabetes. Bariatric surgery has been shown to decrease cardiovascular disease risk. Coronary artery calcium scoring (CACS) is a non-invasive imaging technique that quantifies intra-arterial calcium resulting from atherosclerosis. Elevated CACS has been shown to be correlated with cardiovascular disease progression and morbidity. Currently it is not well established whether morbidly obese patients carry a coronary artery calcium burden or which factors are associated with a higher CACS in a bariatric surgical population pre-operatively.

**Methods** Patients with no prior cardiovascular disease undergoing bariatric surgery were evaluated preoperatively for CACS. Age, sex, smoking status, diabetes status, blood pressure, serum lipids, pre- and post-operative weight and height were also recorded. A ten-year risk of fatal cardiovascular disease was calculated using the European Society of Cardiology’s SCORE tool. Patients were grouped into CACS=0 and CACS>0. Statistical analysis was performed utilizing the Student’s T-test for continuous variables and Chi Square test for categorical variables. P-values less than 0.05 were considered statistically significant.

**Results** Between June 2008 and June 2019, 154 patients were evaluated. The mean (sd) age was 44(11) years. Thirty-six (23%) were male. Forty-eight (31%) patients had subclinical coronary artery calcium scores. Risk factors that were associated with CACS>0 were older age (mean 53(6) vs 40(10) years, p<0.001), male sex (37% vs 17%, p=0.005), diabetes (27% vs 12%, p=0.023), systolic blood pressure (141(17) mmHg vs 132(17)mmHg, p=0.004), and hyperlipidaemia requiring treatment (42% vs 7%, p<0.001). Higher cardiovascular risk scores were associated with CACS>0 (mean 1.2 (1.28) vs 0.29(0.73), p<0.001). The absence of CAC pre-operatively was associated with greater excess weight loss at 12 month follow up (79.71(28)% vs 68.88(22)%, p=0.038).

**Conclusions** Our study demonstrates that coronary artery calcium is associated with adverse cardiovascular risk factors in...
morbidly obese patients. Interestingly, patients with absent coronary artery calcium had a greater excess weight loss by 12 months (range 6–24) following surgery. Coronary artery calcium scoring may be a useful tool in helping further stratify cardiovascular risk and operative outcomes in bariatric populations.

Abstract 39

**IMPAIRED AUTONOMIC FUNCTION AFTER INCOMPLETE CARDIAC REvascularisation**

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10.1136/heartjnl-2020-ICS.39

**Introduction** Incomplete cardiac revascularisation (ICR) assessed by residual SYNTAX score (rSS) is associated with increased 5 year mortality. Furthermore, in the general population our group has demonstrated that impaired autonomic function is associated with increased all-cause mortality.

**Purpose** We hypothesised that ICR would be associated with impaired autonomic function.

**Methods** After ethical approval and informed consent, consecutive patients attending cardiac rehabilitation in a tertiary referral centre were enrolled. All patients had percutaneous coronary revascularisation. Assessment of autonomic function was performed by determining speed of heart rate recovery between 10 and 20 seconds post orthostatic challenge (HRR10-20). During an active stand, real time heart rate, blood pressure and ECG recordings were taken using non-invasive digital photoplethysmography and HRR10-20 determined. Patients with an rSS >0 were considered incompletely revascularised and those with an rSS of 0 fully revascularised. Demographic data were recorded and statistical analysis performed (SPSS v23).

**Results** Patients (n=40) comprised those with complete (CR) (n=30) and incomplete (ICR) (n=10) revascularisation. In the ICR group mean rSS was 9. HRR10-20 was impaired in the ICR group (mean -2.9) compared to the CR cohort (mean -5.3) (p=0.001). Completeness of revascularisation was strongly associated with HRR10-20 (Pearson’s correlation coefficient 0.529; p≤0.0001). (Figure 1) Baseline demographics did not differ significantly. Use of rate limiting medication was similar between cohorts (beta blockers, calcium channel blockers, ivabradine).

**Abstract 39 Figure 1**

**Conclusions** Our data confirm significant correlation between ICR and impaired autonomic function determined by speed of heart rate recovery. Thus determining autonomic dysfunction post ICR may identify those at increased mortality risk.