Results: QTVI was significantly lower in subjects with No-CAN (–0.76 ± 0.62) compared to Subclinical-CAN (–0.11 ± 0.56) and Established-CAN (0.28 ± 0.86; ANOVA $p < 0.003$). Parasympathetic and sympathetic activity were significantly higher for No-CAN vs Subclinical-CAN and Established-CAN, LF (2.17 ± 0.58 vs 1.11 ± 0.65 and 0.94 ± 0.52ms^2, respectively; ANOVA $p < 0.001$) and HF (2.03 ± 0.59 vs 0.92 ± 0.60 and 0.98 ± 0.53 ms^2; ANOVA $p < 0.001$). There was a strong negative correlation between QTVI and sympathetic ($\rho = –0.844$) and parasympathetic activity ($\rho = –0.713$; $p < 0.001$). Moreover, BRS significantly ($p < 0.001$) correlated with QTVI (–0.753), LF (0.758) and HF (0.718).

Conclusion: These results demonstrate a strong association between CAN and cardiac repolarisation abnormalities, which are recognised to increase the susceptibility to cardiac events. Alarmingly there is a clear demonstration of significant abnormalities in early subclinical CAN that appears to be missed in current clinical practice. Further studies are required to examine if early intensive multifactorial risk factor treatment that has been shown to reduce incident CAN will also have an impact on cardiac repolarisation and arrthythmogenic risk.

A17 (P400)

Does the presence of NAFLD influence prescribing behaviour in Type 2 diabetes?

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Aims: NICE guidelines (2016) for management of non-alcoholic fatty liver disease (NAFLD) recommend the use of pioglitazone, given its propensity to improve liver histology. We evaluated current use of pioglitazone in Type 2 diabetes, with and without NALFD: providing baseline data for assessing the impact of this guidance. We also evaluated the use of alternative insulin sensitising medications in NAFLD.

Methods: Cross-sectional study of people with Type 2 diabetes identified from the Royal College of General Practitioners Research and Surveillance Centre (RCGP-RSC) database. We compared the proportion of people prescribed pioglitazone, metformin, and GLP-1 analogues over 12 months (2015) with and without NAFLD. We evaluated the influence of NAFLD on propensity to prescribe, adjusting for confounders (age, duration of diabetes, HbA1c, BMI, renal impairment, and heart failure) using logistic regression.

Results: Of 60,327 people with Type 2 diabetes, 2,396 (4.0%) had a diagnosis of NAFLD. Pioglitazone was prescribed in 2.9% with vs 2.8% without NAFLD ($p = 0.96$); GLP-1 analogues in 5.9% with vs 2.9% without NAFLD ($p < 0.001$); and metformin in 68.2% with vs 57.8% without NAFLD ($p < 0.001$). After adjustment, the patterns of pioglitazone prescribing were unchanged. By contrast, NALFD increased the likelihood for GLP-1 (OR 1.58; 95% CI 1.43–1.74; $p < 0.001$) and metformin prescription (OR 1.25; 95% CI 1.19–1.32; $p < 0.001$).

Conclusions: The presence of NAFLD in Type 2 diabetes does not lead to a greater use of pioglitazone. Clinicians favour metformin or GLP-1 analogues in this group although few data exist for their benefit in NALFD. Trials are taking place to evaluate the effect of liraglutide in NAFLD.

A18 (P167)

An audit of the effects of the dose adjustment for normal eating (DAFNE) course on HbA1c and weight

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Aims: Dose adjustment for normal eating (DAFNE) offers structured education in insulin adjustment according to carbohydrate intake to people with Type 1 diabetes. We audited the impact of DAFNE participation upon clinical outcomes (HbA1c and weight) in people with Type 1 diabetes over three years.

Method: A five day structured education program, DAFNE, covering Type 1 diabetes management was undertaken. Glycaemic control (HbA1c) and weight (kg) were assessed prior to this, and annually for three years. Statistical analysis included paired analysis and repeated measures ANOVA.

Results: 81 participants who attended DAFNE courses between June 2009 and September 2011 were identified. Mean HbA1c and weight prior to DAFNE were 70.4mmol/mol (SD 13.5) and 67.2kg (SD 13.04) respectively. At one year post-DAFNE, there was a mean reduction in HbA1c of 3.2mmol/mol ($p = 0.025$; 95% CI 0.41–5.98) but no effect on weight ($p = 0.12$; 95% CI –0.2 to 1.95). Overall, however, there were no significant differences between pre-DAFNE HbA1c ($p = 0.12$) and weight values ($p = 0.08$) over the three year follow up. Participants were then subdivided into quartiles based upon pre-DAFNE HbA1c measurements. Only the highest quartile (baseline HbA1c > 79mmol/mol) demonstrated a sustained reduction in HbA1c ($p < 0.001$).

Conclusions: Overall the effect of DAFNE upon HbA1c was evident at one year, however, was not sustained over the three year audit period. Participants with the poorest initial glycaemic control appeared to receive a prolonged benefit. Further studies are required to develop an evidence based follow up strategy following DAFNE to improve adherence.

