vations over a long period, and outcome in people with type 2 diabetes treated with insulin. METHODS: Data were extracted from GPRD. An index of glucose variability was generated using RBG observations over a sustained period (≥10 years from insulin initiation) in subjects with ≥5 RBG observations using the difference between the maximum and minimum RBG observation (∆Max-MinRBG). Cox proportional hazards models were developed characterising time to first events for: acute myocardial infarction (AMI), stroke, and severe visual loss, as well as for all-cause mortality. Recognised vascular disease risk factors were accounted for. RESULTS: There were 42,383 subjects who met the inclusion criteria. The subjects excluded were found to be more poorly than those included, with shorter follow up and a greater likelihood of having ever smoked. There was an association between ∆Max-MinRBG and HbA1c whereby subjects with good control were more like to have low variability. Following standardisation for potentially confounding factors, ∆Max-MinRBG (m.mol/l) was associated with all-cause mortality (hazard ratio [HR] = 1.026 per m.mol/l glucose; p = 0.020); stroke (HR = 1.046; p < 0.001), and severe visual loss/blindness (HR = 1.040; p = 0.025). For these three endpoints, ∆Max-MinRBG was a better predictor of outcome than was HbA1c, whereas in AMI, ∆Max-Min RBG was not significant, and HbA1c was (poor control versus good control: HR = 1.53; p = 0.034). CONCLUSION: Although we were unsure why general practitioners were recording RBG observations, glucose variability over a sustained period, as measured by ∆Max-MinRBG, was strongly associated with all-cause mortality, stroke and vision loss in people with type 2 diabetes treated with insulin, and more so than was mean HbA1c over the same extended period.

PDB9

INDIRECT COMPARISON OF ONCE DAILY INSULIN DETEMIR AND GLARGINE IN REDUCING WEIGHT GAIN AND ACHIEVING GLYCEMIC CONTROL, WHEN ADMINISTERED IN ADDITION TO CONVENTIONAL ORAL ANTIDIABETIC THERAPY IN THE TREATMENT OF TYPE 2 DIABETES PATIENTS: A META-ANALYSIS

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OBJECTIVES: Basal insulin administered to type 2 diabetes patients with poor glycemc control, when managed with oral therapy alone, can lead to an increased risk of weight gain and hypoglycaemia. A meta-analysis of randomized controlled trials (RCTs) using treat-to-target protocols was conducted to indirectly compare insulin detemir with insulin glargine on the following outcomes: weight gain, hypoglycaemic episodes, and HbA1c. METHODS: Parallel-group RCTs of at least 26 weeks duration that compared once-daily glaragine or detemir with a common comparator, NPH insulin (bedtime), in insulin-naïve, poorly controlled type 2 diabetes patients receiving oral therapy, were selected. Five open-label trials were identified (N = 2551 patients; N = 1 detemir and N = 4 glargine trials). A fixed-effects meta-analysis was used, with an indirect comparison of glargine (N = 2047 patients) and detemir trials (N = 504 patients) carried out using meta-regression. Weight gain and mean HbA1c change from baseline were analysed as weighted mean differences (WMD). Mean HbA1c level at study endpoint was analysed as standardized mean differences (SMD), and total hypoglycaemic episodes per study were analysed as odds-ratios (OR). Further analyses were conducted which adjusted for covariates. Dosing formulas were comparable across studies. RESULTS: Patients receiving evening detemir gained significantly less weight (unadjusted WMD = -1.22, 95% CI = -2.15, -0.29; p = 0.010) and had a significantly lower total number of hypoglycaemic episodes versus evening glargine (unadjusted OR 0.52, 95% CI 0.28, 0.98; p = 0.044). Mean change from baseline in HbA1c level favored evening glargine, but there was no significant difference between treatments for mean HbA1c level at study endpoint (unadjusted SMD 0.09, 95% CI = -0.16, 0.33; p = 0.480). CONCLUSION: Demetir appears similar to glargine in terms of achieving glycemic control, but is superior to the latter for controlling weight gain and reducing the incidence of hypoglycaemic episodes in this population.

PDB10

UNDERSTANDING INSULIN THERAPY INITIATION FROM A PRIMARY CARE PERSPECTIVE IN THE UNITED KINGDOM USING LOCAL DATA

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OBJECTIVES: In the UK, the role of insulin initiation has traditionally been one for specialist (secondary care) diabetes teams (SDT) but this trend is changing. The increasing role of primary care (PC) in diabetes management highlights the need for appropriate resource planning. This analysis describes the initial findings of a UK primary care audit of patients who were newly initiated on insulin. METHODS: Data were collected from 8 primary care practices in the UK, covering a total of 58,432 people. Medical records were reviewed to ascertain the prevalence of type 2 diabetes mellitus (T2DM), those who initiated insulin in the last 3 years and associated patient and treatment details. RESULTS: A total of 2005 patients (3.4%) had a diagnosis of T2DM. Insulin was initiated in 316 patients with a mean age at initiation of 63 years and duration of illness of 8 years. Of these 149 had been initiated in the last three years (62% PC, 28% SDT) leading to an estimate of annual insulin initiations of 2.19% of all people with type 2 diabetes. The mean HbA1c closest to insulin initiation was similar for PC (10.6%) and SDT (10.4%) patients and 54% patients had BMI ≥ 30 kg/m². Patients commonly initiate insulin following two or more oral medications (57%), the most common being metformin plus a sulphonylurea. Pre-mixed insulins and long acting insulin analogues were common, although use differed between PC (59% long acting insulin analogues) and SDT (49% pre-mixed insulin). CONCLUSION: In the UK, around 2% of people with T2DM will be initiated on insulin annually. The majority of these are initiated within a primary care setting and with HbA1c levels which are above international clinical targets. Given the trend to manage more diabetes in primary care, appropriate resources need to be available to support patients through this intensification of therapy.

PDB11

ASSOCIATION BETWEEN TOPICAL CORTICOSTEROID USE AND DIABETES ONSET

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OBJECTIVES: To confirm or refute a possible association between intense Topical Corticosteroid (TC) use and new-onset diabetes and establish whether it increases with dose and duration of TC use. METHODS: Data for this nested case-control