insipidus (6%-40% transient, 0%-12.5% permanent), cerebrospinal fluid leak (1%-43%) and brain herniation (42%). Radiolox published evidence for 56 months with 24-70% reduction in 88% after 80 days. CONCLUSIONS: TSS represents the appropriate treatment for primary CD. However, there appears to be lower success rates and significant complications in patients with persistent/recurrent disease.

PDB13

ANALYSIS-OF-BARIATRIC SURGERY IN PATIENTS WITH TYPE 2 DIABETES IN CHINA
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OBJECTIVES: Bariatric surgery has been an effective treatment for type 2 diabetes mellitus with body mass index above 35. However, data regarding Chinese population in this topic is inconclusive. The aim of this study is to assess the impact of bariatric surgery on T2DM patients in China. METHODS: PubMed, EMBASE, Cochrane Library, and four other Chinese databases were searched from their inception to July, 2013. All articles were published in Chinese or English. Statistical analysis was performed by Revman 5.0 and Statas12.0, a random effects model was used in this meta-analysis. RESULTS: A total of 46 relevant studies were included with 1,665 patients. 41 studies were before-after studies and one RCT compared Roux-en-Y gastric bypass with sleeve gastrectomy. At baseline, a mean age of 47 years (50% were men), duration of T2DM from 1 month to 23 years. The mean body mass index (BMI) for 1,450 patients was 29.99 kg/m2. BMI, Fasting Plasma Glucose (FPG), hemoglobin A1c (HbA1c), insulin levels and lipids profiles were declined significantly. Notably, SBP/DBP, insulin resistance(HOMA-IR) decreased by 2.56% and got back to normal (±5.6%) after 12 months. Overall, 64.6% of subjects were in remission (complete or partial remission), diabetes was resolved or improved in 90.6% of patients. Weight loss and metabolic parameters had some differences between studies, procedures, gastric bypass was the most effective procedure, followed by gastric banding and sleeve gastroplasty. No major adverse event was reported in these studies. CONCLUSIONS: This meta-analysis revealed that bariatric surgery is an effective treatment for T2DM and dyslipidemia in patients with BMIBMI. However, results were limited to short-term follow up, more high quality studies will be necessary for comparing different surgical procedures and long-term efficacy and safety in the future.

PDB14

ASSESSMENT-OF-EFFECTIVENESS-OF-SELF-MONITORING-OF-BLOOD-GLUCOSE (SMBG) IN DIABETES PATIENTS TREATED WITH INSULIN IN LATIN AMERICA
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OBJECTIVES: Diabetes Mellitus (DM) affects approximately 371 million people worldwide. 37 million are in Latin America. Glycemic control is the key to prevent diabetes-related complications. Using the meter may prevent negative effects to the patient with diabetes and increase the cost. The main objective of this study was to examine the frequency of self-monitoring of blood glucose (SMBG) is worthwhile, in terms of glycemic control, HbA1c levels of patients under insulin therapy. METHODS: Data regarding the burden of DM and the value of SMBG were reviewed. In 2012, a nationwide survey in Latin America was published. We consulted databases of databases such as PubMed, the Cochrane Library, AHRQ and NICE. The intervention was SMBG with meter and test strips. Evidence synthesis of all studies that met the inclusion criteria was conducted through narrative review. Two RCTs presented statistically significant findings indicating HbA1c level reductions of at least 1% (1.3-7.2% 26%) in the SMBG group. A multinational survey found significant benefit of SMBG in data from 10,000 patients. Patients who practiced SMBG had a 2-3 fold increase in the odds of reaching HbA1c targets (< 7%). A Brazilian study found that SMBG with intensive insulin therapy reduces HbA1c by 1.82% compared to 0.66% in the control group. A survey of 1,000 T2DM patients in Mexico found that intensified SMBG demonstrated more influence on HbA1c than demographic information, carbohydrate consumption, amount of exercise, BMI or insulin use alone. CONCLUSIONS: Evidence supports SMBG’s clinical benefits in insulin-dependent diabetic patients, with all studies reporting positive findings that indicated SMBG is related to a decreased HbA1c level, glycemic control, and other clinical outcomes. The SMBG can be an important component in the control of DM, which is projected to be increased to 552 million people globally by 2030. This review found both global and Latin American specific evidence to support SMBG for insulin using diabetes patients.

PDB15

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OBJECTIVES: To analyse the clinical outcomes of dapaflxizin (n= 400) compared to glipizide (n= 401). Compared to dapaflxizin significantly improved HbA1c (Mean difference: MD: -0.51 %, CI: 0.05-0.96), fasted Plasma Glucose (MD: -2.57 mg/dl, CI: -6.65, -4.78, 16 trials, 4924 participants, P<0.0001: I2: 96%), body weight (MD: -1.81 kg, CI: -2.18, -1.43, 18 trials, 6637 participants, P<0.0001: I2: 72%). Similarly, compared to metformin, dapaflxizin significantly improved fasting plasma glucose, body weight and body weight. Latin America demonstrated more influence on HbA1c than demographic information, cardiovascular risk factors association. CONCLUSIONS: Dapaflxizin significantly improved in glycemic control but the risk of urinary tract infection and genital infection raises the concerns over its use compared to existing treatment.

PDB16

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OBJECTIVES: The purpose of this study was to estimate the risk of type II diabetes (T2DM) in children and adolescents initiating atypical antipsychotic (AAP) therapy. METHODS: We conducted a retrospective cohort study using a new user database. The primary outcome was glycemic control. All patients were initiated on an AAP from December 31, 2009 for dependents ages 4 to 18 from an employed, commercially insured population from across the United States were included in our study. Excluded were: patients without diabetes diagnosis, patients who did not have any diabetes treatment and were without any observed history of receiving the medication for at least six months. We constructed a propensity score including variables selected based on causal diagrams to identify matched incident AAP users and non-users. The outcome of interest, new-onset diabetes (T2DM), was defined as a time-dependent endpoint. The subject was followed until the date of new-onset T2DM or the end of study period. The risk of T2DM was evaluated in an intent-to-treat fashion using the Kaplan-Meier estimator and Cox proportional hazard regression that provided hazard ratio (HR) and associated 95% confidence intervals (CI). The study was approved by the University of Kentucky Institutional Review Board. RESULTS: Our study included 6,236 new users and 22,080 non-users. In this propensity score matched sample, the estimated risk of diabetes was twice as high for AAP users (HR 2.61: 1.45-4.29). The noticeable risk differences between AAP-treated and control groups began to appear within four months of AAP initiation and it became constant after six months until the end of the follow-up. CONCLUSIONS: Children and adolescents who were prescribed an AAP medication had a two times higher risk of developing T2DM within six months of initiating medication when compared to non-users. Our study raises questions about continued AAP use in children and adolescents.

PDB17

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OBJECTIVES: We evaluated the association between insulin dose and all-cause mortality, incident major adverse cardiovascular events (MACE), and incident cancer in people with type 2 diabetes using insulin monotherapy. METHODS: We used retrospective observational data from the Clinical Practice Research Datalink (CPRD) from 2000 onwards. Subjects with type 2 diabetes who progressed to treatment with insulin monotherapy were selected. The risk of progression to adverse outcomes was assessed using the Cox proportional hazards model, introducing insulin dose as prescribed international units per kilogram per day as a time-dependent covariate. We carried out extensive sub-group analyses for differing diabetes phenotypes and differing analytical approaches. RESULTS: It was possible to identify 7,589 subjects. Event numbers were as follows: deaths: 1,450; incident MACE, 430; incident cancers, 548. Unadjusted event rates were 66.9 deaths per 1,000 person years, 27.6 incident MACE per 1,000 person years, and 0.11 incident cancers per 1,000 person years. The overall adjusted hazard ratios in relation to an increase in insulin dose of 1 iu/kg/ day were 1.85 (95% CI 1.69-2.03) for all-cause mortality, 1.28 (1.05-1.58) for MACE, and 1.19 (0.99-1.40) for cancer. Findings from sub-group analyses were generally consistent. CONCLUSIONS: There was an association between increasing exogenous insulin dose and increased risk of all-cause mortality and MACE in people with type 2 diabetes. A possible association with cancer was less clear.

PDB18

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OBJECTIVES: When compared to non-Hispanic Whites (NHW), Mexican Americans (MA) in the USA are more likely to be diagnosed with type-2 diabetes and have diabetes-related comorbidities, uncontrolled glucose and access to medical care. This study sought to compare the rate of adherence to diabetes medical management