The 14 randomized control trials of 2537 articles were selected and two reviewers evaluated independently the quality of these selected articles using the Scottish Intercollegiate Guidelines Network (SIGN) tool. RESULTS: The computer-based insulin protocols resulted in a shorter time to reach within target range (MD -1.03, 95%CI -1.70 to -0.35, p< 0.001, I²=77%) and a higher percentage of glucose readings within target range (MD 11.98, 95%CI 8.83 to 15.14, p< 0.001, I²=89%) than the paper-based protocols. The incidence rates of above or below target range in computer-based insulin protocols were acceptable levels and the incidence rates of severe hypoglycemia below 40mg/dL in computer-based insulin protocol was significantly lower than the paper-based insulin protocols (MD -23.41, 95%CI -32.35 to -14.46, p< 0.001, I²=0%). CONCLUSIONS: The automated target glucose control using computer-based algorithms resulted in tighter glycemic control without an increased risk of severe hypoglycemia compared to the conventional paper-based insulin protocol, and all patients were able to achieve the clinical target of glucose fluctuation across the studies were similar. The current results suggest that computer-based algorithms provide an improved alternative to conventional insulin protocols.

PB173 PATIENT PREFERENCES AND PATTERNS AMONG TYPE 2 DIABETES PATIENTS IN SAUDI ARABIA

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OBJECTIVES: To describe the treatment preferences and patterns in patients with type 2 diabetes mellitus (T2DM) is a serious public health concern in Saudi Arabia. Few data have been published that describe how persons with T2DM are managed in clinical practice; we aimed to characterize recent treatment patterns among individuals treated for T2DM in Riyadh, Saudi Arabia. METHODS: Charts from 455 adults with T2DM who visited the King Fahad National Guard Hospital from October 2009 to March 2010 (enrollment period) were systematically sampled until the target (n=250) was reached. Treatment data were then compared to September 2017 data extracted from subject charts. Treatment regimens, their frequency of use, and the number of switches (drug replacement/removal/adding) over the study period were calculated. Analyses were stratified by T2DM duration, data for those recently-diagnosed (≤2 years) and longstanding disease (≥20 years, n=67) are presented. RESULTS: Forty-four percent of subjects were male; at enrolment, mean (SD) age was 61 (13) years, and mean T2DM duration was 11 (8) years. At enrolment, 42% of subjects had received prior insulin treatment (recently-diagnosed: 23%, longstanding disease: 52%). During the study period, the most common regimens were oral combination therapy (41%) and insulin-or combination therapy (32%). Overall, 44% received any insulin therapy during the study period (recently-diagnosed: 25%, longstanding disease: 54%). By study end, 49% had received any prior insulin therapy (recently-diagnosed: 29%; longstanding disease: 58%). On average, T2DM subjects had 1.3 treatment switches over the period, little variation was seen by T2DM duration. The frequency of insulin treatment was low (5% of patients reported in other studies from the region, treatment switches are indicative of attempts to improve T2DM control. Novel therapies may improve clinical outcomes and patients may benefit when comparing the effectiveness of new treatments within Saudi Arabia.

PB174 USAGE OF SELF-MONITORING OF BLOOD GLUCOSE ( SMBG) BY DIABETES THERAPY TYPE IN INDIA

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OBJECTIVES: SMBG is a core component of diabetes therapy, supporting a safe and effective drug therapy and providing feedback on the impact of diet and lifestyle. In 2016, a self-monitoring was conducted in the region to assess the level of SMBG usage in patients by diabetes therapies. METHODS: Source data for this exploratory analysis is the CSD-DFS Diabetes study covering over 2500 drug treated patients with diabetes. All 2392 cases were documented in the 2nd half of 2013. FDS Diabetes is a syndicated research with a fixed representative panel of doctors from larger Indian cities using a standardized documentation of cases. SMBG usage is analyzed by therapeutic subgroups: oral diabetes therapy (OAD 75%), basal supported oral therapy (BOT 6%), conventional insulin therapy (CT 8%), intensive insulin therapy (ITT 5%) and others (3%). Results: Diabetes type 2: 95%, 1,180 patients (52.4%) have a meter for home-testing. Sharing meters by therapists (OAD 58%, BOT 70%, ITT 81%) and others (3%) reduced the SMBG usage to 77% (OAD), 67% (BOT) and 58% (ITT). A comparison of economic methods across all NICE submissions and recommendations might help to close these gaps. The new guideline might help to close these gaps.

GASTROINTESTINAL DISEASES – Clinical Outcomes Studies

PG1 THE COMPARISON OF CLINICAL IMPACT BETWEEN ENTECVIR AND TENOFOVIR IN CHRONIC HBV INFECTION

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OBJECTIVES: To compare the efficacy and safety of Entecavir and Tenofovir in nucleos(t)ide-naive CHB patients with HBV DNA in a medical center. METHODS: We included patients who were enrolled in Tenofovir from 2011/07 to 2012/12, and with a history of chronic HBV infection, a history of malignancy within 3 years before the first time use of ETV or TDF, (3) the history of alcohol abuse, and (4) used other anti-HBV drugs. In Statistics, we used Kaplan-Meier survival analysis to present the HBV DNA suppression and the normalization of ALT. RESULTS: We identified 124 consecutive patients treated with ETV and 24 patients treated with TDF after 18 months, the probability of complete viral suppression was 67.7% in the ETV group and 45.8% in the TDF group (P<0.49). The clinical outcome was almost similar between groups with 77.1% and 83.3% in the TDF group (P=0.159). In the adverse side effects of neurologic, malaise were observed in the patients treated with TDF more than ETV (11.3% vs 5%), but in gastrointestinal disorders, diarrhea was observed in the patients treated with TDF more than ETV (25.0% vs 32%). CONCLUSIONS: Entecavir and Tenofovir have no