PCN39

HEALTH RELATED QUALITY OF LIFE IN POST-OPERATIVE BREAST CANCER PATIENTS

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OBJECTIVES: This study was conducted to evaluate health related quality of life (HRQOL) in post-operative breast cancer patients of Korea. METHODS: A consecu-
tive series of patients with breast cancer who visited to one university hospitals in Seoul after operation as a primary treatment from Feb to Mar 2012 were recruited. Their HRQOL was assessed using EQ-SD, SF36 and FACT-B. General and clinical information was obtained from the interviews and medical chart reviews. HRQOL was analyzed on general and clinical information of them. RESULTS: Among 487 patients with breast cancer, 487 patients complete the questionnaire. All study participants were female and their mean age was 52. In the aged, low education group, and divorced or bereaved people, their HRQOL were lower than those of the other groups, respectively. All correlation coefficients between EQ-SD index, 8 scales of SF-36 and FACT-B score were statistically significant (p<0.001, respectively). CONCLUSIONS: This study showed the HRQOL of post-operative breast cancer patients in South Korea.

DIABETES/ENDOCRINE DISORDERS - Clinical Outcomes Studies

PDB1

RISK FACTORS FOR HYPOGLYCEMIA AMONG VETERANS WITH TYPE 2 DIABETES MELLITUS

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OBJECTIVES: To identify risk factors among veterans with type 2 diabetes mellitus (T2DM) initiated on new anti-hyperglycemic treatments. METHODS: Electronic re-
cords were used to identify veterans with at least 2 records of T2DM diagnosis (ICD-9-CM codes: 250.8, 251.0, 251.1 and 251.2) during index-treatment period and no hypoglycemia during one-year post-index period, respectively. Select patients had no records of hypo-
glycemia, cardiovascular disease, or microvascular complications during the one-
year pre-index period. A logistic regression model was employed to identify the factors for post-index hypoglycemia. RESULTS: Among 44,261 patients (hypogly-
cemia: n=761, control: n=43,500), the incidence rate of hypoglycemia events was 3.57 per 100 patient-years. The hypoglycemia group was more likely to have renal disease, end-stage renal disease, abuse substance, and tobacco use. More patients in the hypoglycemia group had poor glycemic control (RH 3.7-7.4%) was found in the hypoglycemia group (91.4%) compared to those in the control group (87.8%) (p=0.0043). The hypoglycemia group used significantly more health care resources at baseline than the control group [hospitalization (14.6% vs. 7.2%, p=0.0001), emergency room (27.6% vs. 19.3%, p<0.0001), outpatient visits on average (13.33 vs. 7.34, p<0.0001)]. The hypogly-
cemia group was more likely to use insulin at baseline or initiated with insulin as the index drug. Insulin use (basal or index) and renal disease were top risk factors (odds ratio 4.1–5.4) in the logistic model. CONCLUSIONS: Among veterans with T2DM, the hypoglycemia group was in general sicker than the control group. Sub-
populations who were insulin user or with comorbid renal disease were even at higher risk for hypoglycemia.

PDB2

EPIDEMIOLOGY, PATIENT BURDEN AND RELATED COSTS OF OBESITY IN INDIA

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OBJECTIVES: Recent changes in lifestyle has triggered an increased prevalence of obesity even in developing countries such as India. Obesity is known to be corre-
lated with increased risk of Type 2 Diabetes and Cardiovascular diseases. The
increase to 8.73% of China's GNP. CONCLUSIONS: Obesity is a cause of more deaths than malnutrition in most high/middle
level countries in Asia. Indians are especially likely to accumulate intra-abdom-
inal fat increasing a risk of obesity-related comorbidities. The aim of our research was to evaluate the epidemiology and burden of obesity in India. The inter-
national and Chinese national medical databases (MEDLINE, EMBASE, wanfangdata.com, cqvip.com, cnki.net, docin.com, wenku.baidu.com) were searched to collect infor-
mation regarding epidemiology and burden of obesity. RESULTS: We search-
retrieved all relevant publications of obesity published in 2008 and 2009. The prevalence of obesity among Indian adults was setting-dependent. In
epidemiology and burden of obesity.

RESULTS: The prevalence of obesity among Indian adults was setting-dependent. In
epidemiology and burden of obesity.
The 80th percentile subgroup (n monitoring blood glucose use at baseline were more likely to achieve goal (P<0.0001), TG (WMD=-0.50, 95%CI -0.73 to -0.27, P<0.0001); and m-HbA1c was more effective than metformin, lowering LDL (WMD=-0.84, 95%CI -1.33 to -0.354, P=0.0099), TC (WMD=-1.28, 95%CI -1.47 to -1.10 P=0.00001), and TG (WMD=-0.27, 95%CI -0.36 to -0.19, P<0.0001). Heterogeneities were detected during the meta-analysis. CONCLUSIONS: Statins can positively reduce the concentration of total testosterone, TC, TG and LDL. It cannot be confirmed that the use of statin or without statin has any significant impact on the above-mentioned parameters designed, randomized controlled study is needed to ascertain this uncertainty.

**PD86**

**PREDICTORS OF REACHING HBA1C GOAL IN T2DM PATIENTS USING DIPETIDYL PEPTIDASE-4 INHIBITORS (DPP4IS) COMBINATION THERAPY: A SUBGROUP ANALYSIS**

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**OBJECTIVES:** To describe characteristics of T2DM patient subgroups who were more likely to achieve HbA1c goal – 7% with combination treatment of DPP4i with PI or with Met using a predictive model. METHODS: Stepwise logistic regression was applied to MarketScan claims data to develop a predictive model that estimated the probabilities of HbA1c goal achievement in patients receiving DPP4i combinations. Sample selection criteria included: 1) T2DM diagnosis, 2) treatment of DPP4i with PiO or with Met, 3) baseline HbA1c < 7%, and 4) with one-year continuous enrollment. Patients were ranked by the probability of achieving HbA1c<7% and grouped into cumulative percentiles; baseline characteristics of the optimal subgroups identified and the top and bottom percentiles were presented. The predictive model showed that patients who had neuropathy, cerebrovascular conditions, or higher total medication use at baseline were less likely to achieve goal on DPP4i combinations while patients with self monitoring blood glucose use at baseline were more likely to achieve goal. The 80th percentile subgroup (n = 270) had a goal reaching rate of 57.0%, mean age of 50.3 years old, 44.3% female, 38.5% on Met, 13.8% on thiazolidinediones (TZD), and HbA1c = 9.13% at baseline. The 20th percentile subgroup (n = 83), achieved goal at the rate of 72.3%, mean age of 50.6 years old, 46.1% female, 53.9% on Met, 25.7% on TZD, and HbA1c = 8.96% at baseline. CONCLUSIONS: Predictive factors for reaching goal include: 1) use of self monitoring blood glucose, and 2) lack of neuropathy, cerebrovascular disease, or usage of medications. Subgroups that might benefit the most from DPP4i treatment were identified. These patients exhibited a higher likelihood of having prior use of Met or TZD, and baseline Hba1C<7% less than 90%.

**PD87**

**NETWORK META-ANALYSIS OF FIXED DOSE COMBINATION THERAPIES FOR THE FIRST-LINE TREATMENT OF TYPE 2 DIABETES MELLITUS**


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**OBJECTIVES:** To assess the relative efficacy and safety of fixed dose combinations (FDCs) of anti-diabetic drugs in treatment naive patients with type 2 diabetes mellitus (T2DM) using network meta-analysis technique. METHODS: Randomized controlled trials, evaluating FDCs in treatment naive patients with T2DM were searched via Embase® and MEDLINE®. The abstracts were reviewed and data extracted were conformed by two independent reviewers. The outcomes of interest included reduction in HbA1c levels, patients with HbA1c<7%, fasting plasma glucose, HbA1c response, and incidence of hypoglycemia. A network meta-analysis using WinBUGS® was used to combine the reported direct and indirect evidence, and a probability ranking for the included combinations was generated. RESULTS: Eleven trials (n=5781 patients) comparing the following FDCs: sulfonylureas/biguanides (SUL/BGU), thiazolidinediones/biguanides (TZD/BGU), dipeptidyl peptidase-4 inhibitor (DPP-4i)/biguanides (AGI/BGU), alpha-glucosidase inhibitors/biguanides (AGI/BGU), and thiazolidinediones/sulfonylureas (TZD/SUL) were included. Following network meta-analysis using BGU, TZDs, and SUL as common comparators, TZD/SUL was observed to be significantly better in terms of patients with HBA1c<7% than other FDCs [relative risk, 95% credible intervals vs. SUL/BGU (1.16, 1.01-1.3), vs. TZD/SUL (1.12, 1.01-1.24), and DPP-4/BGU (1.18, 1.07-1.29)]. Statistically, however, no significant differences were observed among the FDCs other than TZD/SUL for this outcome. All FDCs achieved clinically meaningful reductions in HBA1c and FPG, though the differences between the FDCs were statistically non-significant. According to the probability ranking for reduction in HBA1c and FPG levels, the rank favored TZD/SUL followed by AGI/BGU, TZD/BGU, SUL/BGU, and DPP/BGU. The probability of occurrence of hypoglycemia was highest with SUL/BGU (73.8%) followed by AGI/BGU (59.2%), TZD/BGU (0.03%), and DPP-4/BGU (0.05%). Incidence of hypoglycemia was not reported for AGI/BGU. CONCLUSIONS: Clinically, all FDCs effectively achieved glycemic control in patients with T2DM, however, the risk ratios from network meta-analysis were inconclusive to determine the relative efficacy of these FDCs. The probability ranking suggested the potential use of TZD/SUL in treatment naive T2DM patients.

**PD88**

**BARIATRIC AND METABOLIC SURGERY IN INDIA – EFFICACY AND SAFETY OF MINIMALLY INVASIVE PROCEDURES**

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**OBJECTIVES:** Obesity and type 2 diabetes mellitus (T2DM) are major health issues in developing countries contributing to increased morbidity and mortality. Bariatric surgery is an effective procedure leading to durable weight loss in morbidly obese patients, while metabolic surgery aims at resolving T2DM. The objective of our work was to assess the rate of obesity surgery performed in India. METHODS: A comprehensive search was performed in PUBMED and websites of Indian medical databases and journals (www.indmed.org, www.dmri.in, www.n-mji.in, www.japi.in). Studies met the inclusion criteria if they enrolled Indian obese patients undergoing bariatric surgery following laparoscopic procedures: sleeve gastrectomy, Roux-en-Y gastric bypass, adjustable gastric banding, single-incision sleeve gastrectomy. RESULTS: Our search retrieved nine studies (978 patients) of which three included T2DM patients (n = 91) exclusively. Postoperative excessive weight loss ranged from 51% to 76% after 12.5% to 24 months follow-up. BMIs were reduced by 5.9-20.5 kg/m², dyslipidemia was resolved in 34-100% patients and hypertension was improved in 67-95% individuals around one year after surgery. Moreover, at the same time pain was reduced in 57-97% patients and sleep apnea in 100% subjects. The incidence of asthma and depression were also reduced following bariatric/metabolic surgery. Metabolic procedures carried out in the subset of diabetics were associated with T2DM resolution in 61-100% of patients, reduction of HbA1c by 2.3-4.0 percentage points and improvement in fasting blood glucose by 60-144 mg/dL. Reduction of BMI among diabetics was in the range between 5.9–9.8 kg/m². Rates of postoperative complications were generally low and only one death was reported due to pulmonary embolism. CONCLUSIONS: Bariatric and metabolic procedures are effective for both weight reduction and improvement or resolution of T2DM. Those procedures are safe and beneficial in morbidly obese patients especially with T2DM.