

PCN33

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 consecutive 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-5D, 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 52.5. 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-5D 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 records were obtained for adults with at least 2 records of T2DM diagnosis (ICD-9-CM codes: 250.xx except for 250.x1 and 250.x3) from the VISN 16 data warehouse from January 1, 2004 to September 1, 2010. The first dispense date of a new antihyperglycemic agent (index drug) was defined as the index date. The hypoglycemia group and control group were identified by hypoglycemia (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 hypoglycemia, cardiovascular disease, or microvascular complications during the one-year pre-index period. A logistic regression model was employed to identify the risk factors for post-index hypoglycemia. **RESULTS:** Among 44,261 patients (hypoglycemia: 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, mental disorder, substance abuse, and tobacco use. More patients under poor glycemic control (HbA1c>7%) 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 (32.7% vs. 19.3%, $p<0.0001$); outpatient visits on average (13.33 vs. 7.34, $p<0.0001$)]. The hypoglycemia group was more likely to use insulin at baseline or initiated with insulin as the index drug. Insulin use (baseline or index) and renal disease were top risk factors (odds ratio>=2) in the logistical model. **CONCLUSIONS:** Among veterans with T2DM, the hypoglycemia group was in general sicker than the control group. Subpopulations 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 correlated with increased risk of Type 2 Diabetes and Cardiovascular diseases. The burden of obesity may be underestimated as Indians are at higher risk of comorbidities with comparatively lower BMI. The aim of our research was to assess the epidemiology and burden of obesity in India. **METHODS:** International and Indian medical databases (MEDLINE, EMBASE, dmri.in) as well as archives of Indian medical journals (nmji.in, japi.in) were searched to collect information regarding epidemiology and burden of obesity. **RESULTS:** Our search retrieved 27 relevant publications. The prevalence of obesity among Indian adults was setting-dependent. In rural areas, obesity was diagnosed in 5.1% - 8.5% and 5.2% - 12.7% of men and women, respectively. In urbanized regions 15.9% - 38.2% of men and 23.5% - 47.6% of women were obese. Evidence for burden of obesity was sparse and based on single trials reporting increased risk of diabetes (RR = 8.45 [1.09; 65.36]), hypertension (RR = 2.19 [1.16; 4.13]) and breast cancer (RR = 2.27 [1.28; 4.01]) in obese as compared to normal-weight patients. No correlation between overweight and excessive risk of death was found. Obesity and diabetes place a significant economic burden on society mainly due to indirect costs including productivity loss, decreased household earnings and higher dependence on welfare. Indeed, 15%-25% of household income is spent on treatment of diabetic patients in India, and with the rising incidence, this will only worsen over time. **CONCLUSIONS:** Obesity and diabetes burden the constrained health care system of India and the entire society, leading to lost productivity and decreased household incomes. With the rising prevalence, this burden will only worsen unless effective measures to address the same are put in place.

PDB3

EPIDEMIOLOGY, PATIENT BURDEN AND RELATED COSTS OF OBESITY IN CHINA

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OBJECTIVES: Obesity is a cause of more deaths than malnutrition in most high/middle income countries. Asians are especially likely to accumulate intra-abdominal fat increasing a risk of obesity-related comorbidities. The aim of our research was to assess the epidemiology and burden of obesity in China. **METHODS:** International and Chinese medical databases (MEDLINE, EMBASE, wanfangdata.com, cqvip.com, cnki.net, docin.com, wenku.baidu.com) were searched to collect information regarding epidemiology and burden of obesity. **RESULTS:** Our search retrieved 34 relevant publications. The prevalence of obesity among Chinese adults oscillated between 2.7% and 13.1% in rural and urban areas, respectively. Most often the overall prevalence in combined rural and urban populations was reported in the range between 4% and 11.6%. Epidemiological trends reveal an alarming increase in the prevalence of obesity among Chinese adults, which increased from 0.3%-2.9% in the late '80s and early '90s, to 3%-11.4% in the first decade of 21st century. This increase translates into a growing number of obesity-related diseases, such as hypertension reaching 18.8% in 2002 and type 2 diabetes (T2DM) affecting 2.6% population. In Beijing, hypertension and T2DM were 25% and 7.7%, respectively. In the Chinese population, severe obesity increases the risk of death by 29%. The growing costs of obesity is a burden on health care. The estimated direct costs of obesity in the year 2000 were nearly \$6 billion, while the indirect costs associated with loss of productivity exceeded \$43 billion, corresponding to 0.48% and 3.58% of gross national product (GNP), respectively. The estimates for productivity loss are rising dramatically to \$106 billion in 2025, which represents an increase to 8.73% of China's GNP. **CONCLUSIONS:** The growing rates of obesity and obesity-related comorbidities is a rapidly growing economic burden on the Chinese health care system and calls for prevention and treatment strategies.

PDB4

DEVELOPMENT AND VALIDATION OF RP-HPLC-UV METHOD FOR DETERMINATION OF GLIPIZIDE IN HUMAN PLASMA

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OBJECTIVES: To develop and validate simple, sensitive and selective HPLC method for determination of glipizide in human plasma. **METHODS:** Liquid-liquid extraction method was used to extract glipizide from the human plasma samples. Chromatographic separation of glipizide was achieved using C18column (ZORBAX ODS 4.6 X 150mm). The mobile phase was comprised of 0.01 M potassium dihydrogen phosphate and acetonitrile (65:35, v/v) adjusted to pH 4.25 with glacial acetic acid. The analysis was run at a flow rate of 1.5 ml/min with an injection volume was 20 μ L. The UV detector was operated at 275 nm. The proposed method was validated as with respect to selectivity, linearity, accuracy, precision, recovery, limit of quantification (LOQ) and stability. **RESULTS:** The calibration curve was linear over a concentration range of 50 - 1600 ng/mL. Intra-day and inter-day precision and accuracy values were below 15%. The limit of quantification was 50 ng/mL and the mean recovery was above 98%. Freeze-thaw, short-term, long-term and post-preparative stability studies showed that glipizide in plasma sample was stable. **CONCLUSIONS:** A rapid, simple, selective and sensitive HPLC method for determination of glipizide in human plasma was successfully developed. The method showed good recovery, accuracy and precision. The method can be successfully applied to in pharmacokinetics and bioequivalence studies to quantify glipizide in plasma samples.

PDB5

STATIN IS A REASONABLE TREATMENT OPTION FOR PATIENTS WITH POLYCYSTIC OVARY SYNDROME: A META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

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OBJECTIVES: To date no consensus has been reached on whether to administer statin to patients with Polycystic Ovary Syndrome (PCOS) routinely. Therefore, we conduct a meta-analysis to synthesize the existing literatures regarding therapeutic effects of statins on PCOS. **METHODS:** A comprehensive literature search was performed using terms such as polycystic ovary syndrome, ovary polycystic disease, PCOS, hyperandrogenemia; exposures including statin, simvastatin, atorvastatin, rosuvastatin, lovastatin, mevastatin, pravastatin, lipidemic-modulating drugs, lipid lowering drugs, and testosterone; study types including randomized controlled trails or studies or randomized in the following bibliographic databases from inception to 30 Sep 2011: Medline, Embase, Cochrane Controlled Trials Register and Biological Abstracts. Identified reference lists were checked manually to retrieve related papers. **RESULTS:** In total, four RCTs were included. Three of four studies were double-blinded while none reported whether of the data was analyzed using Intention-to-Treat analysis. Serum total testosterone and lipid profiles were included as investigation outcomes in all four studies. Differences in reducing serum total testosterone were observed when comparing statin with placebo (Std MD = -3.03, 95%CI -5.85~-0.22, P=0.03) or statin+metformin with metformin (Std MD = -1.07, 95%CI -2.06~-0.07, P=0.04). Heterogeneities were detected in both comparisons ($I^2=96%$ and $88%$ respectively). Meanwhile, statin was more effective than placebo in reducing LDL (WMD=-0.87, 95%CI -1.18~-0.55, P<0.0001), TC (WMD=-