LRYGB had the greatest lifetime costs at every age ($13,506 vs. no treatment, $3,859), leading to a lower ICER than LAGB when compared with no treatment, 1.32 vs. LAGB), leading to a lower ICER than LAGB when compared with no treatment, 1.32 vs. LAGB). The results of LAGB against no treatment were similar, although utility associated with efficiency was much more sensitive in comparison. In results for LRYGB versus LAGB, the model was most sensitive to changes in medical cost parameters associated with efficiency of treatment. CONCLUSIONS: Both LRYGB and LAGB were found to be cost-effective compared to no treatment for morbidity obese people, with ICERs below $25,000 up to age sixty. These results were robust to reasonable model parameter changes. This study also suggests that LRYGB may be more cost-effective than LAGB due to the relative improvement in QALYs gained.

PSU25

CLINICAL AND COST-EFFECTIVENESS OF BARIATRIC SURGERY FOR OBSESE PATIENTS: ECONOMIC EVALUATION IN SOUTH KOREA

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OBJECTIVES: To evaluate the cost-effectiveness of bariatric surgery in obese Korean people. METHODS: The target population was obesity patients defined as having a body mass index (BMI) of BMI >30kg/m2 with diabetes. This study performed a healthcare system perspective of bariatric surgery compared to non-surgical interventions. Incremental cost-effectiveness ratio (ICER) of bariatric surgery compared to non-surgical interventions was calculated in obese people. The cost data was collected from the survey of 9 medical centers who had conducted these obesity treatments and Korean national health insurance statistics, based on 2011 costs. The effectiveness was calculated with percent weight change from baseline, BMI reduction, and proportion of patients with more than 10% weight change. The cost data was collected from the survey of 9 medical centers who had conducted these obesity treatments and Korean national health insurance statistics, based on 2011 costs. The effectiveness data and distribution of surgery and complication was collected from 7 multi-center, 485 patients retrospective chart review. Incremental cost-effectiveness ratio (ICER) of bariatric surgery compared to non-surgical interventions was calculated in obese people. Subgroup analysis using various BMI level with/without diabetes and probability sensitivity analysis was conducted to test the stability of base-case results. RESULTS: The bariatric surgery had higher cost ($US9273) and better effectiveness (18.1% weight loss), the Incremental cost-effectiveness ratio (ICER) was $US552 per one percent weight loss. Through the subgroup and sensitivity analysis under various conditions, robustness of the study results was also demonstrated. CONCLUSIONS: The cost-effectiveness study for clinical outcomes indicated that bariatric surgery was clinical and cost effective alternative to conventional therapy in obese patients.

PSU26

COST-UTILITY ANALYSIS OF BARIATRIC SURGERY FOR THE TREATMENT OF OBSESE PATIENTS IN SOUTH KOREA

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OBJECTIVES: To conduct a cost-utility analysis of bariatric surgery compared to non-surgical interventions in obese Korean people. METHODS: We used Markov model comparing the lifetime expected costs and quality adjusted life years (QALY) between bariatric surgery and non-surgical intervention in the healthcare system perspective. Our target cohort consisted of obese people defined as having a body mass index (BMI) of BMI >30-40 in South Korea. The starting age of cohort was 30 years old. The non-surgical interventions include physician visit, exercise, diet, and pharmacotherapy. The cycle length was 1 year and used half-cycle correction. The health status comprised five states such as no comorbidity, mild/moderate comorbidity (diabetes or/and hypertension or/ and, dyslipidemia), severe comorbidity (CHD or/and stroke), death due to CVD, and death due to other cause. Input data of transition probability for each disease status and, dyslipidemia), severe comorbidity (CHD or/and stroke), death due to CVD, and death due to other cause. Input data of transition probability for each disease status and utility weight calculated from the relationship between weight loss and QALY gain using Korean National Health and Nutrition Examination Survey data. The rate of death due to CVD and other cause were calculated Korean death statistics. The cost data was collected from the survey of 9 medical centers who conducted these obesity treatments and Korean national health insurance statistics, based on 2011 costs. Discount of 5% was applied in cost and QALY Incremental cost-effectiveness ratio (ICER) of bariatric surgery compared to non-surgical interventions was calculated. RESULTS: The cost-utility study indicated that bariatric surgery had US$1,522 Incremental costs and 0.86 Incremental QALY compared non-surgical interventions in the base case analysis, OR 1.93, CI95% 1.46-2.57). The most important variable in the model for log-transformed length of stay was hospital volume (high volume was the 12 months post-index stay. Similar trends were observed in the Medicare population. CONCLUSIONS: Among US patients receiving THR surgery, those with MAW had higher health care costs than patients without MAW.

PSU27

VARIABLES ASSOCIATED WITH LENGTH OF STAY AND ICU NEED IN ROUX-EN-Y GASTRIC BYPASS SURGERY FOR MORBID OBSESE PATIENTS: A CROSS-SECTIONAL STUDY BASED ON THE PUBLIC HEALTH SYSTEM DATABASE (DATASUS) IN BRAZIL

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OBJECTIVES: This is an exploratory analysis of potential variables associated with Roux-en-Y gastric bypass (RYGB) surgery hospitalization resource use pattern. METHODS: Cross-sectional study based on a public database (DATASUS) records. Inclusion criteria were patients undergoing RYGB between January 2008 and June 2011. Dependent variables were length of stay and ICU need. Independent variables were: gender, age at surgery (continuous or categorized as older/younger than 60), hospital volume (high volume: >50 RYGB/year; low volume: ≤50 RYGB/year), surgery at certified center of excellence (CoE) by the American Society for Bariatric and Bariatric Surgery (ASBBS) (yes/no), year of hospitalization. Univariate and multivariate analysis (logistic regression for ICU need and linear regression for length of stay) were performed. RESULTS: Data from 13,069 surgeries were analyzed. 14.8% of patients were male, mean age 38.2 ±10.4 years. 5.2% underwent surgery in a high volume hospital, 11.6% from a certified CoE by ASBBS. In the univariate analysis of potential factors associated with outcomes of interest, the variable with highest effect size for length of stay was hospital volume (high volume: 3.16, CI95% 2.93-3.41) and age group (OR 1.93, CI95% 1.46-2.57). The most important variable in the final model for log-transformed length of stay was hospital volume (adj-OR 1.93, CI95% 1.46-2.57). Among US patients receiving THR surgery, those with MAW had higher health care costs than patients without MAW.