Carpal Tunnel Syndrome

Muscular— Skeletal Disorders including Psychiatric-Related Costs than those Initiated on Other Atypicals.

Results:

Persistence was approximately 30 days longer for patients receiving ziprasidone (n = 762; 201 days) than risperidone (n = 831; 193 days) or olanzapine (n = 762; 201 days). Compliance was significantly (P < 0.01) higher among patients receiving ziprasidone (87%) compared with other treatments (78%–80%). Ziprasidone patients had significantly larger decreases (~$6866) in mean annual psychiatric-related costs following therapy initiation than those on risperidone (~$3353; P = 0.0116) or olanzapine (~$4764; P = 0.0021). The primary driver of cost savings was reduced hospitalization after treatment initiation. Conclusion: Patients initiated on ziprasidone had longer persistence, better compliance, and greater decreases in psychiatric-related costs than those initiated on other atypicals.

Muscular— Skeletal Disorders Including Carpal Tunnel Syndrome

In Incremental Direct Cost of Back Pain in the United States in 2001

Objectives: Back pain is an expensive medical condition and direct medical costs associated with back pain are significant. Estimating resource utilization costs for diseases like back pain based on disease coding have the potential for under-estimation. The objective of this study was to determine direct costs due to back pain in the US population using an incremental cost approach.

Methods: Analysis of the 2001 Medical Expenditure Panel Survey (MEPS) was conducted. Patients who had back pain related physician visits or treatments during 2001 were identified using International Classification of Diseases (ICD-9) codes. Patients without a back pain diagnosis and without a claim for back pain were treated as controls. Least squares regression was used to estimate the incremental cost of back pain adjusting for age, gender, race, occupation, and co-morbidities using the Charlson co-morbidity index. Sample data was projected to the US population and 95% confidence limits for estimates were calculated using the Taylor expansion method. Results: Prevalence of back pain in the US was 8.3% (26,167,199) of the total population. Total annual direct costs for back pain patients were $32,135,937,092 after adjusting for co-morbidities. Mean annual direct cost for a back pain patient was $4241.3 (95% CI $3890.8–$4591.8). Office-based medical provider visits (29.4%), in-patient visits (27.1%), and prescribed medicines (21.3%) were major cost centers for back pain patients. Conclusions: With direct medical costs estimated at more than $32.0 billion in 2001, back pain costs represent a significant amount of health care expenditures. The estimate obtained was more than twice the magnitude of earlier estimates based only on expenditures coded for back pain. Potential for disease cost under estimation may be reduced by using the incremental cost approach.

Obesity

Comparison of Weight Reduction and Satisfaction of Orlistat and Sibutramine

Objective: The objective of this study was to compare and evaluate the efficacy and satisfaction of orlistat and sibutramine treatment in obese female patients at adisorn fort hospital in 2004. Methods: A cross-sectional experimental study by randomized block design was performed. The population was women age 18 to 45 those whom wanted to reduce their weight (BMI > 25) with orlistat or sibutramine under physician control at adisorn fort hospital, Thailand. Sample was calculated by a method based on the alpha of 0.05, beta of 0.2, power of 0.80 effect size = 2, sample size (n) = 40. We administered orlistat (360 mg/d)
or sibutramine (10mg/d) in a randomized, controlled, single-blind clinical study, and evaluated weight and satisfaction during six-weeks of this treatment. **RESULTS:** A total of 40 females 36 +/- 4 yr with orlistat; and 40 females, aged 37 +/- 6 yr with sibutramine) completed six-weeks on exercise and a controlled-energy diet. Orlistat was well tolerated, with gastrointestinal adverse effects as well as inhibiting the assimilation of fat from the bowel. It was approved for long-term treatment of obesity while sibutramine acted on the CNS to control appetite or enhance the feeling of satiation. Significant body mass index (BMI) improvement was detected after six-weeks (p < 0.05) in both groups (p = 0.02, p = 0.04 respectively). Significant waist circumference (WC), but not significant hip circumference (HC), improvement were observed in both groups (p = 0.03, p = 0.14, p = 0.04, p = 0.21 respectively). Orlistat and sibutramine were not significantly different in terms of weight reduction effect (p = 0.14). However, patients were more satisfied with orlistat than sibutramine (p = 0.02). **CONCLUSIONS:** Orlistat and sibutramine could significantly reduce weight. However, patients were more satisfied with orlistat than sibutramine.

**POB2**

RECENT TRENDS AND A FUTURE FORECAST OF POPULATION BODY MASS INDEX LEVELS IN THE UNITED KINGDOM

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**OBJECTIVE:** Patterns of obesity are an important public health consideration. The purpose of this study was to determine the past and future population trends of obesity in the UK (UK).

**METHODS:** Data describing body mass index (BMI) were abstracted from the English Health Survey’s from 1991 to 2002, inclusive. The UK was assumed to follow the same pattern of change in body composition as England. The distributional pattern of BMI was determined and age and sex specific changes in the distribution described over the period. Data were standardized to the UK population in 2001. Ethnicity was accounted for in the forecast using general linear models for age and sex specific groups applied to government forecasts of future demography.

**RESULTS:** BMI increased by a mean value of 1.21 kg/m² (standard error of the mean (SEM) 0.105 to 0.044 [≥18 years]), equivalent to an annual increase of 0.11 kg/m² per year (95% CI 0.106 to 0.123). BMI in women increased on average from 25.6 to 26.8 kg/m², and men’s from 25.9 to 27.1 kg/m². This varied by age and sex. The annual change in mean BMI was linear in every age group. In 1991 and 2002 the proportion of overweight (≥25.0 to <30.0 kg/m²) and obese (≥30.0 kg/m²) people in the population rose from 29.5% and 12.0%, to 31.3% and 18.4%, respectively. The number of overweight and obese people in the general population in 2004 was estimated to be 31.2 million people (52.6%), increasing to 38.0 million people (62.0%) in ten years time, an increase of 6.8 million people.

**CONCLUSION:** If reliable, this estimate clearly represents a serious public health challenge.

**POB3**

PREVALENCE TRENDS OF OVERWEIGHT AND OBESITY AND TREATMENT PATTERNS FOR WEIGHT CONTROL IN THE US POPULATION

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**OBJECTIVES:** To assess epidemiologic trends of overweight and obesity and to examine treatment patterns to control weight in children/adolescents aged 2–19 years and for adults ≥20 years old. **METHODS:** The Third National Health and Nutrition Examination Survey (NHANES III) conducted in 1988–1994 and NHANES 2001–2002 were used. Children/adolescents were classified as at risk for overweight if body mass index (BMI) was ≥85th but <95th percentile and as overweight if BMI was at ≥95th percentile of the sex-specific BMI for age growth charts. Adults were categorized as overweight (BMI 25.0–29.9) or obese (BMI ≥ 30.0). Duration of physical activity was calculated using leisure-time physical activity to assess compliance of CDC/ASCM recommendations. SAS and SUDAAN software were employed to account for the complex survey design.

**RESULTS:** The proportions of children/adolescents at risk for overweight or overweight increased from 13.1% to 14.5% and from 11.1% to 15.5%, respectively, between 1988–1994 and 2001–2002. The prevalence of overweight and obesity for adults also increased from 32.8% to 35.2% and from 22.3% to 30.2%. Prevalence of diabetes in overweight and obese adults slightly increased between 1988–1994 (5.5%, 10.0% respectively) and 2001–2002 (6.1%, 10.6%). However, LDL ≥130 mg/dL was less prevalent in 2001–2002 (53.4% to 41.8% for overweight and 54.0% to 41.0% for obesity). Overall, 10.3% of overweight and 14.9% of obese adults used liquid diet formula, prescription drugs, non-prescription drugs, laxatives or vomiting to control weight in 2001–2002. Only 1% of overweight and 3% of obese adults took prescribed diet pills. About 47% of overweight and 43% of obese adults either took medications or complied with physical activity recommended by CDC/ASCM to control weight.

**CONCLUSIONS:** Overweight and obesity have become more prevalent in the US population during the past decade. However, very few patients took medications prescribed by their physicians to lose or control their weight.

**POB4**

RELIABLE MEASUREMENT OF OBESITY: RISK OF VASCULAR DISEASE COMPLICATIONS AS A FUNCTION OF BODY MASS INDEX AND WAIST-TO-HIP RATIO

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BMI is widely used to measure obesity in outcome studies, but other easily collected measures are available to characterise bodily shape. **OBJECTIVE:** The objective of this study was to determine whether BMI and waist-to-hip ratio (W:H-R), as standard measures of obesity, collectively better explained the likelihood of obesity-related complications. **METHODS:** This retrospective study used data from the England Health Survey, a national representative survey of the general population. Data describing BMI, obesity related diseases and other anthropometric measurements were abstracted from the survey 1991 to 1994, and 1997 to 2002. Using this data, a model was developed to account for various factors that could effect the development of obesity related diseases: diabetes, stroke, heart attack, hypertension and other vascular diseases. Using logistic regression, the association of between BMI categories further broken down by W:H-R categories was determined. The results were standardized for age, sex and ethnicity to generate standardized odds ratios comparing the accuracy of different anthropometric measurements and its combinations to predict obesity related diseases.

**RESULTS:** BMI and W:H-R were independent predictors of disease in obesity. Using both these measures a more precise prediction of the likelihood of developing obesity related complications. Odds ratios in the group with the highest BMI of complications. Odds ratios in the group with the highest BMI of...