domains. Problems with physical component of QoL increased with BMI increase, while for “pain/discomfort” and “anxiety/depression”, normal weight and severe obese people complained more than overweight and obese people. CONCLUSIONS: obesity is expensive for the health care system and society and compromises individuals’ QoL. Policy makers should pay attention to identification, promotion and implementation of programs aimed at preventing obesity.

OSTEOPOROSIS

OSTEOPOROSIS—Cost Studies

COST-EFFECTIVENESS OF RISENDRONATE THERAPY COMPARED TO ALENDRONATE IN POST-MENOPAUSAL WOMEN AT HIGH RISK OF OSTEOPOROTIC FRACTURE: A TAIWAN ANALYSIS

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OBJECTIVE: Hip fracture rates in Taiwan have been reported to be higher than other Asian countries. The objective of this analysis was to assess the cost-effectiveness of risedronate compared to alendronate in high-risk osteoporotic patients in Taiwan. METHODS: A fracture-incidence based Markov model of osteoporosis, where patients transition across states, was used to estimate cost per fracture averted and cost per QALY gained. The population included 1000 women aged 65 years with low bone density and previous vertebral fracture, treated over a lifetime with either risedronate or alendronate. Model inputs specific to Taiwan included general population hip fracture rates, mortality rates, health utilities, and relative risk reduction of fracture with therapy (from published studies). The launch price of risedronate was anticipated as 20% higher than alendronate (risedronate: 16,394NT$/year; risedronate 13,662NT$/year). Vertebral fracture rates were not available for Taiwan, thus incidence rates were based on US ratios of hip to vertebral fracture. The cost of fracture was included only for first year after fracture since chronic treatment is not routine in Taiwan. RESULTS: There were 58 fewer hip fractures, 35 fewer vertebral fractures and 52 more QALYs with risedronate compared to alendronate. The fracture costs were 15% lower for patients treated with risedronate, however total costs (including drug costs) were higher (259,358NT$ [risedronate] vs. 227,296NT$ [alendronate]). The incremental cost was 343,225NT$ (8400€) per any fracture averted, 552,787NT$ (13,500€) per hip fracture averted, and 617,934NT$ (15,100€) per QALY gained for risedronate compared to alendronate. CONCLUSIONS: Risedronate treatment for high-risk osteoporotic women may represent a cost-effective strategy for improving care of patients in Taiwan, despite the fact that there are fewer downstream costs for treatment of chronic fracture-related disability.

CLINICAL AND ECONOMIC IMPACT OF RISENDRONATE TREATMENT FOR POST-MENOPAUSAL OSTEOPOROSIS IN FRANCE

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OBJECTIVE: Osteoporosis and its related fractures are a major source of illness and costs. Approximately 2 million post-menopausal women have osteoporosis in France, resulting in an annual cost of 16 billion. This study assessed the clinical and economic impact of risedronate therapy in a population of women with post-menopausal osteoporosis (PMO) using a computer simulation model. METHODS: A fracture incidence based Markov model of osteoporosis, where patients transition across outcome states over time, was used to estimate the incremental cost per fracture prevented and the cost per QALY gained. The analysis was conducted for a cohort of women aged 70 years with low bone mineral density and prevalent vertebral fracture. The impact of risedronate was assessed over 10 years, with patients treated for the first 5 years. Analyses used French epidemiological and cost data (from published literature). Relative risk reductions with risedronate were set at 60% for hip fracture and 41% for vertebral fracture. RESULTS: When added costs are expressed per unit of benefit gained, the results were approximately 15,861€ per hip fracture prevented and 4351€ per QALY gained. Without treatment, 760 radiographic vertebral fractures and 104 hip fractures occurred in a cohort of 1000 patients. Treatment with risedronate reduced the fractures occurring during the treatment period, resulting in a smaller number of fractures over 10 years: 604 vertebral fractures and 77 hip fractures. If the analysis were extended to the entire PMO population in France, treatment with risedronate could result in a reduction of 312,000 vertebral fractures and 54,000 hip fractures over 10 years. CONCLUSIONS: Analysis on a population level demonstrates the magnitude of fractures and the cost savings that could be averted among French women. Using country-specific data, simulation models can provide realistic estimates of the impact of disease and treatment costs in a population.

TREATMENT COSTS AND DISEASE BURDEN OF PATIENTS WITH PAGET’S DISEASE

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OBJECTIVES: This study assesses disease burden and treatment costs in patients with Paget’s Disease (PD) compared with a matched comparator group (MC). METHODS: This is an observational study using 2001–2002 MarketScan Research databases (MEDSTAT, Ann Arbor, MI), which consist of medical claims, prescriptions and encounter data on 2 million active and retired USA employees. Details include age, gender, drugs prescribed, medical services rendered, ICD-9 diagnostic codes and costs. We linked annual files to create a longitudinal panel with 24 months of observation. Persons with PD were identified by ICD-9 code 731.0. A MC was selected using gender, age and risk adjustment score, which was derived from a DCG/HCC classification system based on presence of 189 medical conditions. In this analysis, we calculated the prevalence of 30 conditions linked to PD and total costs for all medical care. The prevalence of co-morbidities and health care costs were compared in PD and MC, and differences tested using chi-square and t-tests, as appropriate. RESULTS: Our study identified 488 individuals, 244 with PD and 244 matched comparators (MC). The average age was 72.7 years; 50.8% were female. Largest differences in co-morbidities detected between PD patients and MC were: pathological fractures (4.9% vs. 0.4%), heart murmurs (3.3% vs. 0.4%), fractures of femur other than neck (2.9% vs. 0.4), spinal stenosis (2.5% vs. 0.4%), hypercalcemia (1.6% vs. 0.4%), and bone neoplasms (7.8% vs. 2.5%), respectively. Annual per patient outpa-