DIRECT MEDICAL COSTS OF OSTEOARTHRITIS IN SPAIN

OBJECTIVES: To examine annual direct medical & non-medical cost in large-scale patients, participants of the 15–17th IORRA Studies in Oct. 2007- Oct. 2008. We applied a standard data collection instrument was used to register identified resources during prospective medical charts review. The resource utilization was converted into Brazilian Real (BRL), based on 2010 prices. Descriptive analysis of costs and resource utilization and their association with clinical and demographic variables were performed. RESULTS: Eighty two patients were included, 81.7% female, mean age of 76.96 years, hospitalization mean time of 12.66 days. Median total costs per patient were 3,064.76 BRL (95%CI: 2,817.63–3,463.98). Clinical hospitalization and surgical procedure were responsible for 65.6% and 24.94% of costs, respectively. Median costs for patients submitted to surgical procedure were during the fourth day of hospitalization were lower than median costs for patients submitted after the fourth day (2,136.45 BRL and 3,281.45 BRL, respectively, P < 0.00001). A significant difference in average costs per type of surgical procedure was also observed. Variables sex, age over 80 years, fracture site and presence of cardiovascular disease were not associated with statistically significant differences in total costs. CONCLUSIONS: Clinical hospitalization and surgical procedure were the main cost components observed. Higher cost associated to inpatient treatment of hip fractures in patients who performed surgery after the fourth day of hospitalization added to available evidence about an increased risk of mortality after this period reinforce the need of priority establishment to treat elderly patients with hip fracture.

ANALYSIS OF DIRECT MEDICAL AND NON-MEDICAL COSTS FOR CARE OF RHEUMATOID ARTHRITIS PATIENTS USING LARGE COHORT DATABASE, IORRA

OBJECTIVES: To examine annual direct medical & non-medical cost in large-scale rheumatoid arthritis (RA) patient cohort (IORRA) in Japan. METHODS: From patients’ perspective, we calculated direct medical (out-of-pocket costs to hospital & pharmacy) and cost for complementary & alternative medicine(CAM) and non-medical costs (caregiving, transportation,self help devises, house modification) of RA patients, participants of the 15–17th IORRA Studies in Oct. 2007- Oct. 2008. We also assessed correlations between these costs and RA diseaseactivity, disability level and QOL. RESULTS: Data from 3204 RA patients were extracted. Annual direct medical costs were JPY132,000 (out-of-pocket to hospital, USD1 = JPY90), JPY84,000 (out-of-pocket to pharmacy) and JPY 146,000 (CAM), respectively. Annual direct non-medical costs were JPY105,000 (caregiving), JPY22,000 (transportation), JPY5,000 (Out of pocket CAM) and JPY18,000 (house modification), respectively. Considering utilization rates for each cost component (hospital/ pharmacy: 100%, CAM: 31.6%, caregiving: 10.5%, transportation: 100%, self help devises: 21.4%, house modification: 21.4%). We assumed that annual medical/cost medical-cost per RA patient was JPY164,000 and JPY61,000, respectively. These costs increased progressively with worsening RA diseaseactivity, disability level and QOL. For example, patients with lower EQ-SD score (less than 0.5) spent more money than those with higher one (more than 0.8). Average medical and non-medical costs among them were JPY 30,802 vs. JPY17,887 and JPY22,519 vs. JPY19,336, respectively. CONCLUSIONS: Heavy economic burden lies in RA patients and grows heavier as the disease state is exacerbated using IORRA database. The results also suggest that the increase in medical/non-medical cost may be suppressed by proactively controlling RA.

COST-EFFICACY ANALYSIS OF TNF ALPHA ANTAGONISTS IN THE TREATMENT OF RHEUMATOID ARTHRITIS

OBJECTIVES: Estimate the efficiency of Tumor Necrosis Factor alpha (TNFa) antagonists in moderate to severe rheumatoid arthritis (RA). METHODS: The analysis performed from the Spanish Health Care System perspective, considers the annual cost of the drugs, and their efficacy, measured through number needed to treat (NNT) to gain an additional patient who achieves ACR20, ACR50 and ACR70 response. Drug costs were obtained from a Spanish database. Data relative to efficacy was derived from a meta-analysis, which evaluated the anti-TNFa drug adalimumab (ADA), etanercept (ETA), and infliximab (INF), and inflamed (INF). Efficiency was estimated in terms of incremental cost-effectiveness ratios (ICER).

RESULTS: Annual treatment cost with ADA, ETA, and INF is of 13.1166, 12.3146, and 14.0476, respectively. Applying the: 1) ACR20 criteria, the NNT with ADA, ETA, and INF were 4.2 (95% CI, 3.4–5.3), 6.5 (5.2–8.8), and 4, 5(3.6–6.8), respectively; 2) the ACR50 criteria, the NNT with ADA, ETA, and INF were 4.1 (95% CI, 3.4–5.7), 4.4 (3.7–5.5), and 4.6 (3.7–6.2), respectively; 3) the ACR70 criteria, the NNT with ADA, ETA, and INF were 5.6 (4.7–6.5), 6.8 (5.3–9.4), and 8.6 (5.8–16.7), respectively. The incremental annual cost per additional patient who achieves ACR20 response with ADA, ETA, and INF is of 65.871 (95% CI, 64,050–70,995), 80.8 (64,288–1407999), and 116,032 (79,226–184925), respectively. The incremental annual cost per additional patient who achieves ACR50 response with ADA, ETA, and INF is of 236,453, 287,456 (64,491–671,813), and 393,072 (65,451–616,030), respectively. The incremental annual cost per additional patient who achieves ACR70 response with ADA, ETA, and INF is of 474,537 (85,759–699,025), and 836,655 (85,481–115,815), 1206,652 (85,237–124,319), respectively. CONCLUSIONS: The incremental cost per patient who achieves an ACR20, ACR50, and ACR70 response is lower with ADA, though quite similar to ETA, being with both (ADA and ETA) lower than with INF, in the Spanish setting.

RETROSPECTIVE CHART REVIEW TO ASSESS COSTS RELATED TO OSTEOPOROTIC FRACTURES IN SLOVENIA AND SERBIA

OBJECTIVES: To evaluate direct medical costs of treatment for osteoporotic fractures in Slovenia and Serbia from a public payer and patient perspective directly after fracture and up to 1 year follow-up. METHODS: A medical chart review, examining medical resources used to treat the 3 most common osteoporotic fractures (proximal femur, vertebrae and distal radius) in the year after the event. Collection of data from 1 osteoporotic center in Slovenia and 3 in Serbia was carried out by local investigators between December 2009 and March 2010. The treatment costs for each fracture type from the public payer and patient perspective were calculated. The analysis was divided into 2 parts; intervention directly after the fracture (including cost of hospitalization, ambulatory visits, procedures, examinations, and medications) and follow-up for up to 1 year after the event (including costs of hospitalization, outpatient visits, examinations, rehabilitation, medications and devices). RESULTS: A total of 240 patients aged ≥50 years with low-trauma fractures occurring within 5 years before study initiation were included. Average annual costs of treatment of a proximal femur fracture in Slovenia were estimated at €4727 (costs directly after fracture = €4088 and follow-up period = €638) and in Serbia €3002 (€2359 and €642, respectively). The cost of treatment of a vertebral fracture was €4319 as hospital stay costs (57% of cost), and in Serbia €390 (€103 and €287, respectively). Treatment of the distal radius fracture was €1567 in Slovenia (€1046 and €521, respectively) and in Serbia €163 (€57 and €106, respectively). CONCLUSIONS: Treatment of proximal femur fractures vs. vertebral and distal radius fractures generated the highest costs. The treatment costs were significantly higher in Slovenia compared with Serbia. Large disparities between the costs of hospitalization in both countries were the major reason for the observed differences.

MEDICINE TREATMENT COST OF RHEUMATOID ARTHRITIS BEFORE AND AFTER TREATMENT WITH BIOLOGICAL DRUGS

OBJECTIVES: To investigate the medicine treatment cost of rheumatoid arthritis (RA) before and after treatment with biological drugs in the private health care sector of South Africa. METHODS: A quantitative retrospective drug utilization review was performed on medicine claims data of a pharmacy benefit management company (PBM) in South Africa. Data for a four-year period (January 1, 2005 to December 31, 2008) was extracted from the database.

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