PARECOXIB VERSUS KETORETIN, KETOROLAC, AND TENOXMAM IN ACUTE POST-SURGICAL PAIN MANAGEMENT: A COST-MINIMIZATION ANALYSIS FROM THE PRIVATE HOSPITAL PERSPECTIVE IN BRAZIL

Vasconcellos JF, Santos FML, Fernandes RA, Haas LC, Takemoto ML, Fujii RP, Manfrin DF, Ribeiro A, Mould J

OBJECTIVES: To evaluate medical and pharmacy costs associated with breakthrough pain (BTP) in a commercially-insured population with chronic, cancer-related pain. METHODS: The National Breakthrough Pain Survey studied a large commercially-insured population using claims data and structured interviews to assess the prevalence, characteristics, and impact of BTP. Adult patients ≥18 years with >3 claims at an interval of ≥3 months with an ICD-9-CM code indicating a chronic pain condition (cancer or noncancer) and ≥3 opioid prescription claims consistent with chronic use were eligible. Patients were included and interviewed after providing consent, those verifying cancer pain were included in this sub-analysis. All-cause medical and pharmacy costs in 2010 dollars were determined from administrative claims data for the 12-month period before the survey date. Generalized linear models with gamma distribution were constructed because of the skewed nature of the cost data. RESULTS: A total of 2198 patients were interviewed, 1279 had controlled persistent pain, and 145 of the latter group had cancer pain. Of those with cancer pain, BTP was reported by 77.2% (BTP, 112, no BTP, 33). Mean (SD) total annual health care costs for patients with and without BTP were $84,049 ($129,279) and $77,926 ($98,785), respectively. Costs in patients with BTP were 28.6% higher than patients without BTP (P=0.0211) after controlling for health plan, patient demographics, comorbidities, history of prior surgery, neuropathic pain, baseline pain severity, treatment by a pain specialist, and patient-reported pain interference. Mean (SD) total annual pharmacy costs for patients with BTP were $30,000 ($35,406) versus $9,939 ($9,715) for patients without BTP. Patients with BTP had pharmacy costs that were 81.7% higher than patients without BTP (P=0.0265) after controlling for the above variables. CONCLUSIONS: In a commercially-insured population, cancer patients with controlled persistent pain and BTP had higher total health care and pharmacy costs than cancer patients with controlled, persistent pain without BTP.

PSY28

PARECOXIB VERSUS KETORÉTEN, KETOROLAC, AND TENOXMOCAM IN ACUTE POST-SURGICAL PAIN MANAGEMENT: A COST-MINIMIZATION ANALYSIS FROM THE PRIVATE HOSPITAL PERSPECTIVE IN BRAZIL

Vasconcellos JF, Santos FML, Fernandes RA, Haas LC, Takemoto ML, Fujii RP, Manfrin DF, Ribeiro A, Mould J

OBJECTIVES: Anti-inflammatory drugs are widely used in the post-operative analgesia to control acute post-surgical pain management costs and resource utilization, with parecoxib, tenoxicam, and tencoxicam from the perspective of Brazilian private hospitals. METHODS: A cost-minimization analysis was performed to compare intravenous parecoxib (40 mg), ketorolac (60 mg), and tenoxicam (40 mg) per day for 72 hours in post-surgical patients. Tenoxicam was converted to ketorolac to match 200 mg/day, and parecoxib to ketorolac to match 100 mg/day generic (Kpg) and branded (Kpb), ketorolac 30 mg/day generic (Klg) and branded (Klb), and tenoxicam 40 mg/day generic (Tng) and branded (Tnb), in a 3-day hospital stay after an orthopedic surgery. Direct medical costs included drug acquisition, nursing fees to administration, infusion supplies, complications associated to treatment and adverse event management (constipation related to opioid rescue medication, antidote and antinematic drugs, gastrointestinal and surgical-wound bleeding). Resource utilization was estimated through literature review and extracted from Brazilian official price lists (2012 USD values) for each cost component. RESULTS: PBFI was the least costly treatment, with overall costs per patient of 80.95USD, 117.92USD, 182.56USD, 125.27USD, and 131.67USD, for PB, Kfpg, Kfkb, Klgb, Tnb, and Tng, respectively. Incremental costs of comparators driven by surgical wound and gastrointestinal bleeding was responsible for 38.99USD (22.5%), 21.4%, 30.7%, 20.7%, 32.3%, at an intwith Kpg, Kfkg, Klgb, Tnb, and Tng, respectively. No bleeding was reported for parecoxib. Adverse event management (antacid, antidiarrheic, constipation) was responsible for 6.37USD(7.3%), 6.73USD(4%), 11.1USD(13.34%), 11.1USD(13.34%), 7.47USD(7.0%), and 8.74USD(6.5%) with PBFI, PB Kfkg, Klgb, Tng, and Tnb, respectively. Drug acquisition, fees and supplies were responsible for 4.41USD(5.3%), 6.12USD(6.2%), 111.5USD(11.1%), 122.96USD(10.5%), 13.31USD(10.0%), 13.31USD(10.0%), 74.66USD(58.4%), 81.09USD(66.0%), 77.51USD(64.9%), and 8.93USD(67.3%) with PBFI, PB Kfkg, Klgb, Tng, and Tnb, respectively. CONCLUSIONS: Parecoxib exhibited a cost-saving profile over branded or generic ketorolac, ketorolac, and tenoxicam in post-surgical pain management, from the private hospital perspective in Brazil.

PSY29

POTENTIAL IMPACT OF IMMEDIATE RELEASE OPIOID ANALGESICS WITH TAMPER RESISTANT TECHNOLOGIES ON ABUSE TREATMENT AND DRUG ACQUISITION COSTS

Manfrin DF2, Ribeiro A2, Mould J3

OBJECTIVES: To discuss the amoxicillin use as an alternative to penicillin and compare its cost for antibiotic prophylaxis in children with SCD. METHODS: We searched for evidence in MEDLINE (PubMed) with the terms ‘Anemia, Sickle Cell’[Mesh] and ‘Antibiotic Prophylaxis’[Mesh]. In a deterministic fashion, adopting the Brazilian public health system perspective, we did a budget impact analysis comparing amoxicillin to penicillin. The target population was estimated from the hidroxyurea’s approval in Brazil. The costs of 3.4%.

CONCLUSIONS: TRT for patients with history of opioid abuse can potentially result in savings in abuse treatment costs and overall cost reductions.

PSY30

PENCILIN AND AMOXICILLIN PROPHYLAXIS IN CHILDREN WITH SICKLE CELL DISEASE (SCD): COMPLIANCE AND COST COMPARISON

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OBJECTIVES: To compare the amoxicillin use as an alternative to penicillin and compare its cost for antibiotic prophylaxis in children with SCD. METHODS: We searched for evidence in MEDLINE (PubMed) with the terms ‘Anemia, Sickle Cell’[Mesh] and ‘Antibiotic Prophylaxis’[Mesh]. In a deterministic fashion, adopting the Brazilian public health system perspective, we did a budget impact analysis comparing amoxicillin to penicillin. The target population was estimated from the hidroxyurea’s approval in Brazil. The costs of 3.4%.

CONCLUSIONS: In the United States (US), approximately 862 patients have been identified with SCD. In the United States (US), approximately 862 patients have been identified with SCD. In the United States (US), approximately 862 patients have been identified with SCD.