NEUROLOGICAL DISORDERS – Health Care Use & Policy Studies

PN1D

IMPACT OF COPAYMENT REDUCTION OR EXEMPTION PROGRAMME ON GENERIC DRUG UTILISATION: THE SPECIFIED DISEASE TREATMENT RESEARCH PROGRAMME IN JAPAN

Tomita N., Kanatan Y.

National Institute of Public Health, Saitama, Japan

OBJECTIVES: In Japan, the Specified Disease Treatment Research Programme provides copayment reduction or exemption for patients with 56 designated rare and intractable diseases/syndromes according to disease severity and patients’ income levels. The objective of this study is to examine the impact of the Specified Disease Treatment Research Programme on generic drug utilization under the fee-for-service payment system. METHODS: We extracted and analysed claims data with indication for Parkinson’s disease, which is subject to the Specified Disease Treatment Research Programme, from the Social Health Insurance claims data processed from February to April 2011. Extracted data were analysed in terms of patients’ age and income levels, types of public subsidy, prescribed places (clinic/hospital or pharmacy) and pharmacologic classes. RESULTS: During the three months, cumulative total number of 72,145 patients in Social Health Insurance programme were prescribed drugs for Parkinson’s disease, of which 10,013 were entitled to the Specified Disease Treatment Research Programme. Overall average generic utilization rate is 15.46% on a volume basis. Average generic utilization rate for those entitled to the Specified Disease Treatment Research Programme is 4.04%, whilst for patients eligible for medical assistance programme is 21.75%. Generic utilization is fewer in the elderly than in the younger generation. CONCLUSIONS: On 2008, fee-for-service utilization rate in patients with Parkinson’s disease compared with placebo or other active medicines in diabetic and non-diabetic PN patients. Two reviewers independently screened for eligible studies, assessed risk of bias, and extracted data. Mean difference (MD) and 95% confidence interval (CI) were used for pooling continuous data. RESULTS: Four RCTs compared ALC with placebo and reported in 3 articles (n = 523) were included. Compared with placebo, ALC significantly reduced Visual Analogue Scale (VAS) of PN patients (MD, 1.28; 95%CI, 0.93-1.64, P < 0.0001). In the subgroup analysis, ALC on VAS was similar in diabetic and non-diabetic PN patients (diabetic subgroup: MD, 1.19; 95% CI, 0.34-2.04, P = 0.006; oral only subgroup: pooled MD, 1.15, 95% CI, 0.33-1.96, P < 0.0001). ALC appeared more effective in PN patients than non-PN patients (diabetic subgroup: MD, 1.47; 95% CI, 1.06-1.87, P < 0.0001; non-diabetic subgroup: MD, 0.71; 95% CI, 0.01-1.43, P = 0.05). No severe adverse events related to ALC were reported. The most common adverse events were pain, headache, paraesthesia, hyperesthesia, pricking, biliary colic and gastrointestinal disorder. The rate of severe events were similar in ALC and control group. CONCLUSIONS: ALC could reduce VAS in PN patients with acceptable safety. However, further trials with larger population and longer follow-up are required to confirm these findings.

PN9

AGE AND GENDER DISTRIBUTION OF OUTPATIENT CARE PHYSIOTHERAPY SERVICES FOR CEREBRAL PALSY AND OTHER PARALYTIC SYNDROMES IN HUNGARY

Molics B., Jármai M., Endret D., Zempléiny A., Borocz I.

University of Pécs, Pécs, Hungary, 
National Institute for Quality- and Organizational Development in Healthcare and Medicines, Pécs, Hungary, National Health Insurance Fund Administration, Pécs, Hungary

OBJECTIVES: The purpose of our study is to assess the frequency related to Diseases of the nervous system within out-patient care and determine the total health care expenses of them in Hungary in 2009. METHODS: CONCLUSIONS: Data were derived from the nationwidewide database of Hungarian National Health Insurance Fund Administration (NHIFA), based on official reports of outpatient care institutes. The evaluation on the number of cases treated by two types of treatment codes are listed in the chapter of the Guidelines of NHIFA for ‘Physiotherapists, massage-therapists, conductors and other physiotherapy practices’. The diseases of the nervous system are listed in the International Classification of Diseases (ICD) with code of 000-099. RESULTS: Diseases of the nervous system account for 1.331.675 cases in the annual number of the physiotherapy-related activities (3231843 cases) showing an approximately 4.12% prevalence. The following top-10 medical procedure were responsible for 48.48% (465662) of total activities: individual treatment (7.79 %), passive motion therapy on multiple limbs (6.24%), selective nerve stimulation therapy (5.89%), muscle strengthening exercise (5.82%), training for circulation improvement (4.6%), parts of the body per individual physiotherapy (4.19%), ergotherapy (3.78%), exercise to prevent cardiovascular complications (3.68%), Hand massage (3.33%), electrotherapy – facial nerve (2.96%). The total financial cost of all of the physiotherapeutic treatments provided in diseases of the nervous system was 3,888 million Hungarian Forint (1.25 million Euro) exceeding the fee-for-service method. CONCLUSIONS: The ratio of each procedures accounts for 71.72 % (955073) of total services. The passive procedures are more common than the active in the 20 most commonly used activities list. Our results could be used for interpretation of the economic impact and the financial planning of the studies of the treated diseases of the nervous system.

PN11

REVERSAL OF CHRONIC FATIGUE INDUCED ALTERATIONS BY SESAMOL IN MICE: EVIDENCE FOR INVOLVEMENT OF OXIDATIVE STRESS AND INFLAMMATORY PATHWAY

Nguyê Ng., Täwel S., Banéal P., Nüdling J., Nandakumar K., Pai K.S.R.

Manipal University, Manipal, India

OBJECTIVES: A wide body of literature suggest in vivo neuroprotective, antioxidant, anti-inflammatory and antiaging properties of Sesamol. This study was aimed to elucidate the protective effect of sesamol in experimental model of chronic fatigue syndrome (CFS). METHODS: Firstly, Sesamol was tested for its antipressor potential in mouse models using forced swim test (FST) and tail suspension test (TST). Later, Sesamol was examined in mouse models of chronic stress fatigue induced by chronic forced swimming for 15 days. Brain biochemical (superoxide dismutase (SOD), glutathione–S-transferase (GST), glutathione (GSH), lipoxigenase and nitrite levels) and plasma cytokines [tumour necrosis factor α (TNF-α) and interleukin 6 (IL-6)] levels were assessed to correlate the possible mechanism of action associated with fatigue symptoms. Further, adenal ascobic acid measurement was done to correlate corticosterone levels. RESULTS: Mice administered with Sesamol showed significant decrease in immobility time in acute FST and TST. Sesamol significantly attenuated progression of CFS in experimental model as compared to control. Sesamol also corrected the other cognitive deficits (locomotor activity, long-term memory, hyperalgesia) associated with CFS. Furthermore, it rectified the diminished levels of antioxidant enzymes such as SOD, GST and GSH in brain and altered levels of proinflammatory cytokines (TNF-α and IL-6). CONCLUSIONS: This finding suggests that anti-fatigue activity of sesamol against chronic induced fatigue in mice. The present outcome offers a therapeutic application of sesamol against CFS and also offers the scope for its development against neuropsychiatric disorders.

URINARY/KIDNEY DISORDERS – Clinical Outcomes Studies

Puk1

TADALAFIL IN BENIGN PROSTATIC HYPERPLASIA: PROTOCOL FOR THE SYSTEMATIC REVIEW OF ADVERSE EVENTS


Optum Global Solutions, Noida, India

OBJECTIVES: Benign prostatic hyperplasia (BPH) is an age related disorder, however its symptoms begin to appear in some men as early as age 40 years. As per estimates every second person has BPH by the age of 60 and 90% of individuals develop BPH by age 85 years. Tadalafil is a selective PDE5 enzyme inhibitor approved to treat men with BPH. The aim is to systematically review the medical literature for randomized control trial and identify the adverse events (AE) associated with tadalafil use in BPH. METHODS: All published randomized controlled trials (RCTs) comparing tadalafil with a placebo or active interventions for the treatment of BPH with or without any co-morbidity (such as but not limited to erectile dysfunction) were included. The search strategy was spreading from databases such as PubMed, EMBASE, Cochrane Library, and Google Scholar. Articles, titles and then full-text manuscripts of all selected articles will be retrieved and assessed by two independent panels. Disagreements on studies selection will be resolved through discussion. A pre-designed data extraction form will be used by two reviewers for the extraction of AE and other study findings. Cochrane risk of bias assessment checklist will be used for the risk of bias assessment and the quality of included studies. Descriptive and quantitative data synthesis will be done for AE reported in all the studies. Meta-analysis will be performed using RevMan (v.5.0). RESULTS: Though there are several studies assessing tadalafil use with erectile dysfunction, a systematic review/meta-analysis of the evidence reporting its AE profile when used for...

A810 VALUE IN HEALTH 17 (2014) A719-A813