OBJECTIVES: To characterize patients suffering from restless legs syndrome (RLS) and assess their annual health care resources consumption in comparison with a population of average ambulatory patients seen by General Practitioners (GPs), in France. METHODS: This study was based on anonymous individual longitudinal medical records of adult patients suffering from RLS provided by physicians from a permanent panel of representative French GPs. RLS was defined accordingly to established diagnostic criteria. Patients with at least one complaint of legs and/or sleep symptoms suggestive of RLS in 2003 were included. Data about patients’ socio-demographic characteristics, clinical status, medical resources consumption and sick leaves over one year were collected retrospectively. For the cost comparison, RLS patients were matched for sex and age to a corresponding random population of patients followed by the same GPs. Average annual costs in € were estimated from the perspective of Health Insurance. RESULTS: A total of 515 RLS patients were included. Mean age was 63.8 years and 76% were female. 14% of patients had both complaints of leg and sleep symptoms, 59% only leg troubles and 27% only sleep disturbances. All together, RLS patients consumed significantly (p < 0.0001) more health care resources than those from the comparison group. On average in 2003, they saw 11.6 times their GPs (versus 4.6 in the comparison group), 7 investigations were prescribed (versus 4.3) and they had had 46.8 drug prescriptions (versus 16.5). The mean annual medical cost of RLS patients’ follow-up by GPs was twice higher than that of average consulting patients (€840 versus €391, p < 0.0001). CONCLUSIONS: This study shows that patients satisfying to validated diagnostic criteria consumed significantly more medical resources than “ordinary” patients in primary care bearing in mind that RLS remains an unknown and under-diagnosed condition. This population deserves thus a special attention in order to optimize the treatment.

THE COST-EFFECTIVENESS OF TREATING PATIENTS WITH RESTLESS LEGS SYNDROME (RLS) USING ROPINIROLE

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OBJECTIVES: Idiopathic RLS (Ekhov syndrome) is a sensorimotor disorder that leads to disrupted sleep and poor quality of life. Until now, there have been no internationally approved treatments for this disorder. This study evaluated costs and outcomes resulting from the use of ropinirole in patients with RLS.

METHODS: Data were combined from 553 patients enrolled in two matching, pivotal, randomized, 12-week, double-blind, placebo-controlled studies. Patients with moderate-to-severe RLS received ropinirole or placebo, with a maximum allowable dose of 4mg/day. The primary outcome measure was the International Restless Legs Scale (IRLS). IRLS scores at baseline and study endpoint were mapped to the multi-attribute utility instrument EQ-5D based on expert opinion to derive Quality-Adjusted Life Years (QALY’s). Costs of study drug, concomitant neurological medications and cost of adverse events were applied in the model from the perspective of the UK NHS. Lower cost per QALY gained indicates better cost-effectiveness.

RESULTS: Based on combined analysis of the entire treatment population over 12 weeks, the QALYs gained for ropinirole and placebo were 0.095 (0.082–0.106) and 0.075 (0.063–0.086), respectively. The mean costs per patient for ropinirole and placebo were £210.52 (£197–£223) and £42.34 (£34–£53), respectively. The incremental QALYs and costs were 0.020 (0.002–0.037) and £168.18 (£150–£187), respectively, resulting in an incremental cost per QALY of £8405 (£4557–£41,524). Extrapolation of IRLS scores at trial endpoint to 52 weeks improved the incremental QALY to £6748. For patients reporting more severe sleep disturbance or more severe symptoms at baseline, the cost-effectiveness ratios improved to £5810 (£3210–£20,177) and £4587 (£2881–£10,508), respectively.

CONCLUSIONS: In the absence of an active-treatment comparator, this analysis found that treatment of moderate-to-severe RLS with ropinirole is cost-effective compared with placebo using conventional UK cost-effectiveness standards, particularly in patients with more severe sleep disturbance and severe RLS symptoms at baseline.
dosing or placebo, was conducted in levodopa-treated patients with motor fluctuations. Patients were then followed in a double-blind extension study (patients treated by active drug remain on their initial treatment). In some countries, patients were asked to participate in a pharmacoeconomic sub-study (PE). A cost analysis (in euros year 2003) examined resource utilisation, costs and caregiver burden of patients taking rasagline versus entacapone. RESULTS: A total of 62 patients participated in each active treatment arm. Reduction in OFF Time after 18 weeks was comparable in each arm. Reduction in UPDRS total score after six additional months was similar in each arm. Both treatments were associated with comparable resource uses at each PE visit. Health care costs (except drugs) were 105€ for rasagline and 88€ for entacapone. Total costs (health care + sick leave) were 107€ for rasagline and 156€ for entacapone. Caregiver’s Relative Stress Scale scores after four months of treatment were 34.5 for rasagline and 33.9 for entacapone and 37.5 and 33.9, respectively, after 6 additional months. Difference between treatments in total caregiver’s time on the entire period (9 months) was 34.9 hours in favour of entacapone. None of the differences were statistically significant. CONCLUSIONS: Resource use was lower than in routine population. Treatment with rasagline and entacapone results in similar resource use and caregiver’s burden. This is in line with the comparable efficacy of both treatments on motor fluctuations and activities of daily living. Thus, costs of treatments will have a clear influence on the total healthcare costs difference between both treatments.

MARKOV MODEL OF ADJUNCTIVE ANTIETIPELEPTIC TREATMENT FOR CHILDREN—A COMPARISON OF TOPIRAMATE AND LAMOTRIGINE
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OBJECTIVES: Choosing an appropriate anti-epileptic medication (AED) is a complex decision, especially in a pediatric population where there is greater multiplicity of epileptic conditions, and greater heterogeneity with respect to syndrome types, causes and prognoses compared with adults. With a dearth of well-designed, long-term trials, economic modelling techniques must be employed to evaluate the cost-effectiveness of treatment options. An economic model of the treatment of refractory partial seizures was developed to provide the first assessment of the cost-effectiveness of topiramate as adjunctive treatment in children. METHODS: A Markov model was developed to combine data from clinical trials, cost-of illness studies, epilepsy-related mortality surveys, and utility studies to model long-term treatment. Due to lack of data, in some cases information relating to adults had to be adjusted and used. Only lamotrigine was evaluated in a pediatric population in a trial similar in design to the one available for topiramate. Based on these trials, the model was used to evaluate the cost-effectiveness of adjunctive treatment with 6mg/kg/day topiramate against 8mg/kg/day lamotrigine. The expected costs associated with each treatment were calculated for 2002 from the perspective of the UK NHS. Changes in quality of life were measured by the EQ-5D. A probabilistic sensitivity analysis was undertaken. RESULTS: There is little difference in response rates between adjunctive lamotrigine and adjunctive topiramate treatments for children. However, in the clinical trials driving the model topiramate was associated with a 5% seizure freedom rate while no one became seizure free in the lamotrigine trial. As a consequence, topiramate was associated with slightly higher QALY gains compared to lamotrigine. Topiramate treatment was also cheaper and therefore had a higher probability of being cost-effective. CONCLUSIONS: Further research is warranted in childhood epilepsy in almost all areas. This exploratory analysis shows topiramate to be a cost-effective treatment option.

COSTS AND OUTCOMES ASSOCIATED WITH THE USE OF BOTULINUM TOXIN TYPE A (BTX-A) IN THE TREATMENT OF FLEXED WRIST/CLENCHED FIST POST-STROKE SPASTICITY
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OBJECTIVES: Stroke is the largest cause of severe disability in adults. Approximately 40% of survivors at 12-months will have upper or lower limb spasticity. Upper limb spasticity is particularly debilitating as patients may experience difficulties in routine daily activities. Basic treatment includes physiotherapy and oral antispastic agents. The objective of the present study was to analyse the costs and outcomes of BTX-A injections as add-on to the basic treatment for flexed wrist/clenched fist spasticity compared to basic treatment. METHODS: Due to absence of empirical data, a Delphi expert panel of Swedish and Finnish neurologists was convened to estimate treatment outcomes and resource utilisation. On average the experts treated 125 patients per year with BTX-A. Unit costs were obtained from official Swedish and Finnish sources. A decision analytic model was used to compare treatments. The model included outcomes, post-stroke mortality and treatment costs. The model used a health care sector perspective and a 12-month horizon. RESULTS: The Finnish experts estimated that 70% reached their treatment goal with BTX-A compared with 34% with basic treatment (66% / 32% when adjusted for mortality). Medication costs were higher with BTX-A (179€ vs. 205€). However, rehabilitation costs (neurologist, GP, nurse, physiotherapy) were lower due to improved treatment outcome (13,097€ vs. 15,940€). Hospitalisation costs were equal (3053€). Total costs with BTX-A were slightly lower. The weekly need for physiotherapy was the major cost driver. Several sensitivity analyses showed robust results. Results from Sweden will be reported in the final presentation. CONCLUSIONS: The analysis showed that a greater proportion of patients whose treatment included BTX-A therapy reached their treatment goals and as a consequence this reduced the total physiotherapy resources required over time. Moreover the analysis showed that BTX-A therapy was slightly cheaper. Consequently neurologists should consider BTX-A as a treatment for post-stroke spastic patients.

HEALTHCARE RESOURCES USED BY SPANISH PRIMARY CARE PHYSICIANS IN PATIENTS WITH SUBJECTIVE MEMORY COMPLAINTS OR COGNITIVE IMPAIRMENT: THE ISSEA STUDY
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OBJECTIVE: Describe health care resources used by Spanish primary care physicians (PCP) in patients who attend for first time due to subjective memory complaints or cognitive impairment. METHODS: Observational, longitudinal, multicentric and naturalistic study in which 105 PCP of all-over Spain participated. Patients 60 years or older attending to PCP due to over 6-month subjective memory complaints or cognitive impairment.