COST-EFFECTIVENESS ANALYSIS OF ANTITHROMBOTIC TREATMENT WITH CLOPIDOGREL IN PATIENTS WITH MYOCARDIAL INFARCTION, STROKE, AND PERIPHERAL ARTERIAL DISEASE IN THE NETHERLANDS

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OBJECTIVES: The CAPRIE study has demonstrated an 8.7% relative risk reduction (RRR) for atherothrombotic events (vascular death, myocardial infarction, ischemic stroke) compared with aspirin (ASA) in patients with symptomatic atherothrombotic disease. The objective of this study was to assess the cost-effectiveness of clopidogrel relative to ASA for secondary prevention of ischemic events in the Netherlands. METHODS: The cost-effectiveness, in terms of cost per life-year saved, was determined with a Markov model in which patients were divided according to vascular events and time from last event. Effectiveness data were derived from the CAPRIE study; long-term outcomes were based on epidemiological estimates concerning age specific event rates and case fatality rates. Direct costs were updated from previous studies, indirect costs were disregarded due to the age of the patients. Discount rate was 4% for both costs and effects. RESULTS: Compared with aspirin, using event-specific risk reductions, 1-year treatment with clopidogrel costs €743 more with a gain in life-years and quality adjusted life-years (QALY’s) of 0.033 and 0.043 respectively. Using a constant RRR of 8.7%, the results were consistent providing a cost per life-year saved of €19,462 and a cost per QALY of €15,779. Sensitivity analyses revealed that uncertainties surrounding the outcomes are mainly driven by the expected effectiveness, most notably when defining sub-groups. The higher the risk for events, the better the cost-effectiveness ratio. In comparison to no treatment (ASA intolerance or previous failure) clopidogrel is expected to combine gain in effectiveness (0.158 life years, 0.210 QALY’s) with savings (€332 per patient). CONCLUSIONS: Clopidogrel is a dominant strategy in patients not eligible for treatment with ASA. The cost effectiveness is within an acceptable range when compared with ASA, especially in high-risk patients.

ECONOMIC EVALUATION AND SURVIVAL ANALYSIS OF IMMUNO-ADSORPTION IN PATIENTS WITH DILATED CARDIOMYOPATHY

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OBJECTIVES: Idiopathic dilated cardiomyopathy (DCM) is a life threatening heart disease and major reason for heart transplantation. Short time medical efficacy of immunoadsorption (IA) for DCM-patients has been demonstrated in first clinical studies. Objective of this study was to determine 5-year survival rates and direct medical costs to calculate costs per life year gained from a societal perspective. METHODS: Based on a previously published matched case-control study with clinical endpoints 34 patients of similar age, sex, duration and severity of DCM were included. Inpatient hospital costs of initial hospital stay were calculated from data extracted from patients’ files and hospital’s internal costing. Patients and treating cardiologists were contacted, thus determining resource use for primary and specialist’s outpatient care, inpatients hospital stays and drugs during follow up. RESULTS: Patients treated with IA show a highly significant better survival: 5-year survival rate was 82% compared to 41%, Logrank statistics after Kaplan-Meier analysis p = 0.0071. Cost for IA were €28,400 per patient. Five-year medical costs were €118,600 per patient of IA group and €75,500 in controls; the costs per year of survival were €24,900 in IA group respectively €28,900 in controls. Incremental cost-effectiveness was €34,365 per life year gained. CONCLUSIONS: For the first time in a matched controlled study design survival analysis and economic evaluation of this new emerging technology for patients with DCM were performed. Although high initial treatment costs for IA occur the significantly better survival leads to reasonable costs per LYG.

USE OF RESOURCES AND COST IMPLICATIONS OF STROKE PROPHYLAXIS WITH WARFARIN FOR PATIENTS WITH NON-VALVULAR ATRIAL FIBRILLATION

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OBJECTIVE: To investigate the use of resources and cost implications of stroke prophylaxis with warfarin for patients with non-valvular atrial fibrillation (NVAF) in clinical practice. METHODS: All new patients with NVAF referred to anticoagulation clinic over a recruitment period of 21 months were studied. Patients were interviewed personally on their first visit then by telephone call every 4–6 weeks for a mean (SD) of 19 (8.1) months, range (10 to 31 months). They were asked about any bleeding events or bleeding related extra doctor’s visits, procedures or hospital admissions. We also inquired about the method and the cost of transport to the anticoagulation clinic, time off work for the patient and/or his carer and the costs involved. Costs of warfarin treatment were viewed as: a) cost of the drug; b) cost of INR monitoring (analysis, travelling, nurse visits, time off work, and postage); and c) and the costs associated with bleeding (bleeding related extra-doctors visits or hospital admissions). RESULTS: A total of 402 patients were included. Mean (SD) age was 72.3 (10.3) years and 224