TREATMENT PATTERNS AMONG PATIENTS WITH ADVANCED MELANOMA: A RETROSPECTIVE LONGITUDINAL STUDY

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OBJECTIVES: A range of treatments have been used for late stage metastatic melanoma including chemotherapy, immunotherapy drugs (given alone or in combination), palliative surgery and radiation therapy. Nevertheless, current treatment practices in Australia for patients with advanced melanoma are poorly defined. As such, a retrospective longitudinal survey was conducted to gain an insight into the treatments currently used in this patient group. **METHODS:** Three Australian public hospitals provided patient level data. Inclusion criteria encompassed patients with a history of an unresectable stage III/IV melanoma (advanced melanoma) at initial diagnosis and had at least 6 months follow-up between January 1, 2005 and December 31, 2006. Information on demographics, disease characteristics, adverse events, survival and treatment history was obtained from medical records of all eligible patients. Descriptive statistics were performed for the four most frequently used first-line treatments. Survival estimates were assessed using Kaplan Meier methods. Comparisons of survival by treatment choice were assessed using a log-rank test. **RESULTS:** In total, 51 patients were recruited with a mean age of 61.6 years and the majority Caucasian (96.1%). Twelve patients (23.5%) were stage III and 23 (45.1%) stage IV. Specific staging of remaining 16 (31.4%) advanced melanoma patients was unknown. The main first-line treatments were dacarbazine (17.6%), fotemustine (15.7%), radiotherapy (23.5%), and surgery (23.5%). Patients treated with surgery were younger and mainly stage IV at diagnosis. Surgery was associated with longer survival ($P = 0.0016$); however, a causal relationship cannot be inferred. There was a tendency for fewer patients to receive surgery for second-line treatment with slightly more receiving radiotherapy. Chemotherapy was associated with nausea while hematological events were common in fotemustine patients. **CONCLUSIONS:** This study found that four main treatments are used for unresectable stage III/IV melanoma: dacarbazine, fotemustine, radiotherapy and surgery. The data suggests that surgery was associated with longer overall survival compared to the alternative therapies.

CARDIOVASCULAR DISORDERS – Clinical Outcomes Studies

COST-EFFECTIVENESS OF ACUTE ISCHEMIC STROKE IN CHINA: MARKOV MATRIX ANALYSES

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OBJECTIVES: To measure economic consequences of NBP (Butylphthalide) for acute ischemic stroke in China. METHODS: A multi-center, randomized, double-blind control study was conducted, 220 patients were admitted into the treatment group and control group, the main regimen is A1 (Butylphthalide sodium chloride injection and Butylphthalide sodium chloride capsule), A2 (Butylphthalide sodium chloride injection), B (Ozagrel injection). We explored the MRS (modified Rankin score) to establish Markov state transition model, with six different health states. The cost and effectiveness data were come from the studies based on Chinese acute ischemic stroke studies. Based on transferred Markov matrix, we will obtain the time period for disease steady-state and predict long-term costs and cost-effectiveness from the patient's perspective. **RESULTS:** A1 group reached the steady state first, five cycles (10 months), A2 and B group were behind a period. The steady state cost of A1 group involved 79,396.90 yuan, more than A2 group by 19,379.54 yuan, and 85,806.71 yuan for B group, compared with the extension days with no obvious significant. At a steady state, the cost-effectiveness ratio of A1 Group's health state was 86.3 thousand yuan, A2 group 82.1 thousand yuan and B group 96.4 thousand yuan, Thus, economic results of A group (A1 and A2) were better than B group, A2 group slightly better than A1 group, but given the time to reach a steady state, the A1 group had more advantages of economic effects. **CONCLUSIONS:** Based on the results of this model-based economic analysis, A1 strategy was the most cost-effective option in comparisons with A2 and B strategies for acute ischemic stroke in China.

SUCCESSFUL IMPLEMENTATION OF A P&T APPROVED THERAPEUTIC INTERCHANGE PROGRAM OF ANGIOTENSIN II RECEPTOR BLOCKERS IN A MEDICAL CENTER IN TAIWAN

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OBJECTIVES: Therapeutic interchange is not a well-accepted clinical practice in the medical society in Asia. Clinic blood pressure readings, patients' tolerance, and cost-effectiveness were used as measures to evaluate the impact of a therapeutic interchange program implemented at a medical center in Taiwan. **METHODS:** Taipei Medical University-Wan Fang Medical Center initiated a therapeutic interchange program involving angiotensin II receptor blockers (ARBs). Data were retrospectively collected for 444 hypertensive outpatients who were converted from other ARBs to candesartan. Evaluation of therapeutic efficacy, adverse effects associated with therapy, and drug costs was conducted before and after the program implementation. **RESULTS:** Patients who were converted to candesartan experienced no statistically significant differences in blood pressure, and the average number of antihypertensive agents used per patient remained unchanged. A direct cost savings of US$62,237 was estimated for the 444 patients studied, which amounted to a savings of more than US$730,000 annually for all outpatients using ARBs. Only 3.15% of patients developed ADRs potentially related to the candesartan and none required hospitalization. **CONCLUSIONS:** Based on the results of this retrospective chart review, the present therapeutic interchange program was successfully developed and implemented. This is the first study to establish the positive impact of a well-run ARBs therapeutic interchange program in Taiwan.

MIXED TREATMENT COMPARISON OF PROPHYLAXIS REGIMENS FOR THE PREVENTION OF VENOUS THROMBOEMBOLISM IN TOTAL HIP REPLACEMENT, HIP FRACTURE, TOTAL KNEE REPLACEMENT AND GENERAL SURGERY

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OBJECTIVES: To compare the efficacy and safety of several different anticoagulant therapies in high-risk surgical patients using a mixed treatment comparison (MTC) approach. **METHODS:** A manual literature search for randomized double blind controlled trials (RDBCTs) was undertaken that compared any two of the following agents: enoxaparin, rivaroxaban, unfractionated heparin (UFH) or placebo and reported rates of venous thromboembolism (VTE) in patients undergoing total hip replacement, hip fracture surgery, total knee replacement and general surgery. Bayesian methods of MTC meta-analysis were applied to synthesize data from 31 RDBCTs. Safety data (defined as major hemorrhage) were extracted when available. Patients received prophylaxis for up to 15 days, or extended therapy up to 35 days post-surgery. **RESULTS:** All treatments were compared to placebo using the Odds Ratio as a measure of efficacy. When compared to placebo, the incidence of VTE was reduced by ≥50% with prophylactic therapy post-hip surgery; patients undergoing extended prophylaxis with enoxaparin or rivaroxaban received the greatest benefit, with a reduction in the risk of VTE of 87% or 95% respectively. Prophylaxis also reduced the incidence of VTE after knee surgery by ≥80%; patients treated with enoxaparin or rivaroxaban were 87% or 92% less likely to experience VTE, respectively, when compared to placebo. Prophylaxis after general surgery significantly reduced the risk of VTE over placebo by ≥76%. The risk of major hemorrhage was highest with UFH, followed by rivaroxaban and enoxaparin. **CONCLUSIONS:** The MTC approach resulted in a comprehensive examination of the effect of thromboprophylaxis on the rate of VTE and major hemorrhage in high-risk surgery. Upon examining the body of clinical data, the evidence is clear: thromboprophylaxis is highly effective at preventing VTE in patients undergoing high-risk surgery. When compared with rivaroxaban and UFH, prophylaxis with enoxaparin resulted in similar and lower incidence of VTE respectively, with less major hemorrhage.

EFFECT OF PRETREATMENT WITH ANGIOTENSIN-CONVERTING ENZYME INHIBITORS ON IN-HOSPITAL MORTALITY AFTER ACUTE ISCHEMIC STROKE

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OBJECTIVES: Pretreatment with angiotensin-converting enzyme inhibitors (ACEI) has shown promising results in decreasing the incidence and the severity of ischemic stroke in populations at risk, and in improving ischemic stroke outcomes. The aims of this study were to investigate the impact of ACEI use before ischemic stroke onset on in-hospital mortality and to identify the independent predictors of in-hospital mortality among ischemic stroke patients. **METHODS:** It is a retrospective cohort study of all acute ischemic stroke patients admitted to a 1200-bed hospital located in northern Malaysia from June 1, 2008 to November 30, 2008. Data were collected from medical records and included demographic information, diagnostic information, risk factors, previous ACEI use and vital discharge status. SPSS version 15 was used for data analysis. **RESULTS:** Overall, 327 acute ischemic stroke patients were studied, of which 119 (36.4%) had documented previous ACEI use. During the study period, 52 (15.9%) of the acute ischemic stroke patients died in hospital. In-hospital mortality was significantly lower among patients who were on ACEI before the attack ($P = 0.002$). The independent predictors for in-hospital mortality among ischemic stroke patients were the presence of diabetes mellitus ($P = 0.023$), renal impairment ($P < 0.001$) and heart failure ($P = 0.007$). Moreover, prior use of ACEI was an independent predictor for survival after ischemic stroke attack ($P < 0.001$). **CONCLUSIONS:** This study provides evidence that the prophylactic administration of ACEI is a potential life-saving strategy. Furthermore, knowledge of in-hospital mortality predictors is necessary to improve survival rate after acute ischemic stroke attack.