COMPLIANCE INFLUENCE, PERSISTENCE AND THE BLOOD PRESSURE CONTROL GRADE ASSOCIATED WITH THE INCIDENCE OF CARDIOVASCULAR EVENTS AND THE SANITARY COSTS IN COMPARISON OF FIXED-DOSES IN THE ARTERIAL HYPERTENSION TREATMENT

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OBJECTIVES: To determine the incidence of cardiovascular events (CVE) and the sanitary costs in function of the compliance, persistence and blood pressure control; comparing patients consuming fixed-doses (FD) in the treatment of HTA. METHODS: Observational-multicentric design. It was included patients >30 years appertaining to six team of primary care and two hospitals, that started pharmacological treatment for hypertension during 2006. It was established two groups: FD (I: Enalapril, ARA Bisiuretics and FD (I): Dih, ARA II + Dih, separately). Main measures: socio-demographics, co-morbidity, parameters Chlaron-index, compliance, persistence and control therapeutic objects (criteria: ESH-ESC). It was determined the accumulated incidence tax of CVE and a total-cost model (differentiating: sanitary/direct; non-sanitary/indirect). The patients’ pursuit was realized during two years. Statistic analysis: logistic regression, proportional risk model of Cox and the ANCOVA, P < 0.05. RESULTS: It was recruited 1605 patients, 1,112 (69.3%) in FD and 493 (30.7%) in FD, P < 0.001; age average: 69.4 (12.2) years; women: 55.5%. Patients in FD were associated with the ischemic cardiopathy OR = 1.4 (CI of 95%: 1.1–2.1); and organ insufficiencies OR = 1.5 (IC of 95%: 1.2–2.2), P < 0.031. Patients in FD showed a better therapeutic compliance (77.6 vs. 71.9; P < 0.001) and treatment persistence at 24 months (62.1% [CI of 95%: 56.3–67.9%] vs. 49.7% [CI of 93%: 38.5–56.9%], P < 0.001). The optimum control of the arterial pressure in FD was higher (48.9% [CI of 95%: 43.0–44.8%] vs. 46.7% [CI of 95%: 36.5–57.8%], P < 0.001). The accumulated incidence tax of vasculocerebral accident in FD was 4.6% vs. 2.4%; P = 0.041. The total cost in FD was lower (€165.07 vs. €1674.8; P < 0.001), in specialized care (€316.1 vs. €316.3; P < 0.001) and loses of labour productivity (€44.3 vs. €38.4; P < 0.001). CONCLUSIONS: Treatment of compliance and persistence for hypertension in FD improves the therapeutical control, causing a reduction of CVE and total sanitary costs.

ANTIARRHYTHMIC DRUGS IN THE CLINICAL PRACTICE IN SPAIN

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OBJECTIVES: Antiarhythmics drugs (AADs) are considered the first-line treatment of atrial fibrillation (AF). However, they present a high adverse effects (AEs) rate. The aim of the present study is to know the health resources and the costs associated with the management of AEs of main AADs. METHODS: The incidence of AEs of main AADs (amiodarone, sotalol, flecainide and propafenone) has been obtained from the Summary of product characteristics or correspondent clinical trials. The use of health AADs (amiodarone, sotalol, flecainide and propafenone) has been obtained from the May 2005 to March 2006, national tariffs or published data. Average procedure cost was calculated based on mathematical (m-mat) and geometrical (m-geo) means. Final endpoint was the development of side effects (cough, arterial hypotension, allergies, headache, etc.) was the major budget impact for the National Health Service. RESULTS: The most expensive AEs have been pulmonary fibrosis: €2,177.49, cardiac events (mainly tachycardia or bradycardia): €1,422.08, and endocrine disorders (as hyperthyroidism: €244.06 and hypothyroidism: €239.06). When costs are analysed in relation with the drug to which are associated, results are as follows: sotalol has been associated with the highest costs: €269.42, followed by flecainide: €132.25 and amiodarone: €239.06, whereas propafenone has been associated to the lowest cost: €48.09. However, although amiodarone is not the AAD associated with the highest cost, considering current Spanish AADs market, it is the one that has more economic repercussion. CONCLUSIONS: Current AADs may cause AEs and their management is related to health resources consumption. Pulmonary and cardiac events have been associated to the major cost. Considering current clinical practice in Spain, amiodarone is the treatment that supposes a major budget impact for the National Health Service.

ECONOMICS ESTIMATION OF SIDE EFFECTS CORRECTION ANTIHYPERTENSIVE MEDICAL PRODUCTS OF INHIBITORS-ACE IN RUSSIAN HEALTH

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OBJECTIVES: To assess the cost of the basic course of pharmacotherapy of arterial hypertension (AH) of inhibitors-ACE, direct costs associated with the correction of side effects (SE), developing on the background of their application. With further pharmacoeconomics evaluation of inhibitors-ACE. METHODS: Cost analysis, modeling, a consideration of the basic price of therapy trade names (TN) inhibitors-ACE INN: enalapril, hisapril and the calculation of direct costs associated with correction of SE in patients diagnosed with stage II AH. Medical patients’ route, the cost structure were modeled by questioning physicians, cardiologists of Institute of Gerontolog, Clinical Hospital 155, Moscow. The study takes into account the cost: symptomatic therapy, specialist consultations, emergency care, hospital bed-days, laboratory and instrumental manipulations. Data registered in RF TN obtained from the site www.med.ru, info about pharmaceuticals www.med.ru. We take into account recommendations of standards of care for patients with AH, developed by Health Ministry of Russia. The cost of the basic course of pharmacotherapy and PE are estimated at 30-day time period for 1 patient. Average daily dose the drugs accounted for enalapril—5 mg/day, lisinopril—10 mg/day. RESULTS: The develop-ment of side effects (cough, arterial hypotension, allergies, headache, etc.) was the cause of drug withdrawal enalapril in 5.3% of patients, lisinopril in 3.8% of patients. The study calculated the cost of the courses were the main pharmacotherapy TN lisinopril and 316.1 rubles, and ENA 5.512 (69.3%) in FD and 493 (30.7%) in FD, P < 0.001. Patients in FD showed a better therapeutic compliance (77.6 vs. 71.9; P < 0.001) and treatment persistence at 24 months (62.1% [CI 95%: 56.3–67.9%] vs. 49.7% [CI 95%: 38.5–56.9%], P < 0.001). The optimum control of the arterial pressure in FD was higher (48.9% [CI 95%: 43.0–44.8%] vs. 46.7% [CI 95%: 36.5–57.8%], P < 0.001). The accumulated incidence tax of vasculocerebral accident in FD was 4.6% vs. 2.4%; P = 0.041. The total cost in FD was lower (€165.07 vs. €1674.8; P < 0.001), in specialized care (€316.1 vs. €316.3; P < 0.001) and loses of labour productivity (€44.3 vs. €38.4; P < 0.001). It was estimated that access to MRI (i.e. patients implanted with MRI-compatible pacemakers) would generate up to 21% reduced diagnostic costs compared with no access to MRI (i.e. patients implanted with older generation pacemakers). CONCLUSIONS: Increased access to the diagnostic superiority of MRI may have an impact on diagnostic resources for pacemaker patients; this increased access can be provided with the availability in the market of new pacemakers engineered for MRI compatibility.
clinical and quality of life benefits of iron deficiency treatment in CHF patients using FCM.

RESULTS: The cost consequence included hospital LOS on CTVU, HDU and ward and pacemaker implantation costs. Twenty-five patients were retrospectively identified by clinicians with TAVI experience who might have been eligible to receive TAVI in the previous year of establishment of TAVI in the market. The patient specification was aligned with the TAVI device CE marking criteria. The average TAVI patient cost was obtained from a manufacturer-sponsored economic model which used UK patient level data from their sponsored registry. The hospital’s local database was used for unit costs. Costs were calculated on mean values for CTVU clinical intensive care unit, HDU (high dependency unit), ward and pacemaker implantation. We also calculated the mean cost per case based on the total length of stay (LOS) for CTVU, HDU ward and pacemaker implants of each of the isolated AVR and AVR plus valvular disease (AVR + CABG) procedures.

CONCLUSIONS: The cost consequence model was sensitive to long LOS on CTVU and HDU in the AVR plus CABG group. Using a cost consequence model TAVI was at worst cost neutral and at best most likely to deliver substantial savings in this centre in this well defined patient population. This finding is significant in assessment of the “real” cost impact for substituting TAVI for high risk conventional surgery patients.

OBJECTIVES: TAVI is a novel interventional procedure and is considered as an alternative to surgery in high risk patients with severe aortic stenosis. For commissioning purposes, a cost consequences model was derived to look at the impact of substituting TAVI for high risk conventional surgery patients.

METHODS: The cost consequence included hospital LOS on CTVU, HDU, ward and pacemaker implantation costs. Twenty-five patients were retrospectively identified by clinicians with TAVI experience who might have been eligible to receive TAVI in the previous year of establishment of TAVI in the market. The patient specification was aligned with the TAVI device CE marking criteria. The average TAVI patient cost was obtained from a manufacturer-sponsored economic model which used UK patient level data from their sponsored registry. The hospital’s local database was used for unit costs. Costs were calculated on mean values for CTVU clinical intensive care unit, HDU (high dependency unit), ward and pacemaker implantation. We also calculated the mean cost per case based on the total length of stay (LOS) for CTVU, HDU ward and pacemaker implants of each of the isolated AVR and AVR plus valvular disease (AVR + CABG) procedures.

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