Abstract

Title: Analysis of pharmacotherapy and drug related problems in patients with arterial hypertension in Greece

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Background: Arterial hypertension or high blood pressure is a chronic medical condition which is characterized by elevated blood pressure in the arteries and is an important risk factor for future development of cardiovascular disease. Also belongs to asymptomatic diseases because it usually does not cause symptoms for years until a vital organ is damaged. Moreover is a major cause of morbidity and mortality, due to its association with some other serious diseases like coronary heart disease, cerebrovascular disease, atherosclerosis, renal disease, dyslipidemia, diabetes, obesity and metabolic syndrome. Arterial hypertension for adults, who don't suffer from any other kind of diseases, is defined by an elevation of blood pressure to 140 / 90 mm Hg or to higher values.

Aim: In the theoretical part the main aim is to analyze information regarding etiopathogenesis, diagnostic methods and treatment strategies of arterial hypertension, as well as classification and causes of drug-related-problems to antihypertensive agents. In the experimental part the aim is to analyze the pharmacotherapy and drug-related-problems of 60 Greek hypertensive patients.

Methods: Literature research was made during a four month period, mainly from PubMed and guidelines of European society of hypertension. Additionally 60 patient cases were collected from one Greek health professional specialist (cardiologist) regarding age, gender, pharmacotherapy, dosage scheme, strength and adverse drug reaction which were used for statistical analysis.

Results: The present retrospective study included 60 patient cases. Hypertension can affects all ages with higher prevalence in men gender. Most common co-morbidities along with hypertension were dyslipidemia and coronary heart disease accounting 37% and 32% of the population, respectively. Most frequently used antihypertensive drug groups was β-blockers and angiotensin II receptor blockers (alone or in combination with hydroclorothiazide) along with antidyslipidemics as additive to antihypertensive therapy. Once daily regimens and combination therapy of antihypertensive agents appears to be more favorable accounting 88% and 68% of the population, respectively. The most common adverse drug reactions appear to be bradycardia, fatigue, peripheral edema and dry cough, mainly due to β-blockers, amlodipine and angiotensin-converting-enzyme-inhibitors. Additionally increased levels of creatine phosphokinase and myalgia were observed mainly due to statins, as additive to antihypertensive therapy for management of co-morbidities, like dyslipidemia.

Conclusion: On this study 60 hypertensive patient cases was collected from one cardiologist, in small city of 50.000 inhabitants in north Greece. Due to certain limitations these findings are not representative of a whole Greek population and it can be used only for observational purpose, to give us just an idea of the kind of pharmacotherapy used most frequently in Greek population, along with the drug related problems commonly faced. Further investigations it will be necessary in the future to produce more accurate and representative findings.