

Abstract

The Study Utilization of Antihypertensive Agent in Hypertension Emergency

Patient

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Background: Hypertensive emergency is characterized by a severe elevation in blood pressure (>180/120 mmHg) complicated by evidence of impending or progressive target organ dysfunction. The prevalence of hypertensive emergency is 1% of total patient either primary hypertension or secondary hypertension. Treatment of hypertensive emergency is tailored to each individual case based on the extent of end-organ damage as well as other comorbid conditions. Blood pressure management in this setting requires the use of parenteral drugs, as precise and rapid control of blood pressure is critical. The ideal rate of blood pressure lowering is unclear, but reducing the mean arterial pressure by 20-25% has been recommended.

Objective : The aim of this study was to document the pattern of antihypertensive agent prescribed in hypertension emergency patient. Also this objective was to examine type, dosage, route and identify any potential Drug Related Problems (DRPs).

Method : The analysis was conducted descriptively by using hypertension emergency patient's medical record (retrospective data) who underwent from 1st January to 31st Desember 2009. The result were compared with guidelines based on JNC VII.

Result : Therapy for hypertension emergency using antihypertensive agent is nicardipine with dosage between 1.5 µg/kg/minute until 2.0 µg/kg/minute by intravena infuse based on JNC VII . The rate of blood pressure lowering by mean arterial pressure 20-25% consist most of the patients but only 7 patients, their blood pressure lowering more than 25% because the interaction of other drugs. The use of therapy between 1 to 3 days based on JNC VII and got 2 patients using nicardipine more than 3 days because of the phenytoin. Others drug interaction were identified between ACEI with aspirine, allopurinol, diuretic and between digoxin and phenytoin.

Conclusion : Most of patient in this study had given appropriate therapy according to guidelines based on JNC VII.

Key word : Drug utilization, antihypertensive agent, hypertension emergency