A Study to Identify Resistant Hypertension and Role of Spironolactone in its Management

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Abstract: Introduction: Resistant and uncontrolled hypertension offer great challenge, in terms of higher risk of morbidity, mortality and not the least, difficulty in diagnosis and management. Our study tries to identify the importance of two crucial aspects of hypertension management, i.e. drug compliance and optimum dosing and also the effect of spironolactone on blood pressure in cases of resistant hypertension. Methodology: A prospective study was carried out among patients, who were referred as case of resistant hypertension to Hypertension Clinic at Gandhi memorial and associated hospital, Lucknow, India from August, 2013 to July 2014. A total of 122 Subjects having uncontrolled BP with ≥3 antihypertensives were selected. After ruling out secondary resistance and with appropriate lifestyle modifications, effect of adherence and optimum doses was seen with monitoring of BP. Only those having blood pressure still uncontrolled were true resistant. These patients were given spironolactone to see its effect on BP over next 12 weeks. Results: Mean baseline BP of all (n=122) patients was 150.4±7.2 mmHg systolic and 92.1±5.7 mmHg diastolic. After promoting adherence to the regimen, there was reduction of 4.20±3.65 mmHg systolic and 2.08±4.74 mmHg Diastolic blood pressure, with 26 patients achieving target blood pressure goal. Further reduction of 6.66±5.99 mmHg in systolic and 2.59±3.67 mmHg in diastolic BP was observed after optimizing the drug doses with another 66 patients achieving target blood pressure goal. Only 30 patients were true resistant hypertensive and prescribed spironolactone. Over 12 weeks, mean reduction of 20.62±3.65 mmHg in systolic and 10.08 ± 6.46 mmHg in diastolic BP was observed. Out of these 30, BP was controlled in 24 patients. Side effects observed were hyperkalemia in 2 patients and breast tenderness in 2 patients. Conclusion: Improper adherence and suboptimal regimen appear to be the important reasons for uncontrolled hypertension. By virtue of maintaining proper adherence to an optimum regimen, target BP goal can be reached in many without adding much to the regimen. Spironolactone is effective in patients with resistant hypertension, in terms of blood pressure reduction with minimal side effects.

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