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P118 Arterial Stiffness in Patients with Arterial Hypertension on Short Term Dual Treatment with Fimasartan/Amlodipine

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ABSTRACT

Background: Pulse wave velocity (PWV) reflects arterial stiffness and is an independent predictor of cardiovascular mortality and morbidity. It is important to determine the effect dual therapy has on both BP and PWV.

Methods: A quasi-experimental study was performed in patients with grade 1 and 2 primary hypertension (HTN). Patients received the combination amlodipine/fimasartan (5 mg/60 mg/day) for 8 weeks. Anthropometric and hemodynamic measurements were made after a 2-week washout period and at week 8 of treatment. The brachial-ankle pulse wave velocity (baPWV), SBP, DBP, Pulse pressure (PP), central systolic blood pressure (cSBP) and the augmentation index normalized to 75 bpm (pAIx75) were measured.

Results: We included 42 patients (14 women) aged 56 ± 16 years. We observed a decrease in baVOP, 17.99 ± 2.80 m/s vs 16.14 ± 2.36 m/s, (p < 0.001); SBP 160 ± 18 mmHg vs 138 ± 14 mmHg (p < 0.001); DBP 96 ± 14 mmHg vs 82 ± 10 mmHg, (p < 0.001); PP 63 ± 18 mmHg vs 56 ± 14 mmHg, (p < 0.001); AIx75 85 ± 9% vs 80 ± 10%, (p = 0.002); and cSBP 151 ± 18 mmHg vs 128 ± 15 mmHg (p < 0.001). Before the treatment 71% patients had arterial stiffness and after the treatment only 33% of the patients had it, the BP goal of <130/80 was achieved in only 16%.

Conclusion: The short term dual therapy with amlodipine/fimasartan significantly decreased baPWV, cSBP, PP, SBP, DBP and pAIx75. Only 16% of the patients achieved the BP goal with this treatment.

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