

STROKE AND SECONDARY PREVENTION. BP LOWERING DRUGS LESS EFFECTIVE IN POSTSTROKE HYPERTENSIVE PATIENT (CI+AH) COMPARED TO HYPERTONICS (AH). CONTROVERSIAL INTERPRETATION: NOT APPROPRIATE DOSIS OR APPROPRIATE HEMODYNAMIC COMPENSATORY MECHANISM?

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Introduction: EBM documented good effect of antihypertensive therapy in numerous randomized studies. Other studies demonstrated controversies and low AH control in real life medicine (RLM)

Aim: To compare the effect of the same doses of BP lowering drugs, individually/in combination in Hypertonics (AH) with poststroke hypertensive patients (CI+AH)

Material: 3554 out-ward patients, moderate AH (BP: 150.4 +/- 14.9/94.2 +/- 8.9mmHg), overweighted (BM:28.9 +/- 4.6) were included in the prospective, multicenter open-labeled STAIRS study. Whole group was divided into two subgroups:

1. hypertonics (n=3292) without any complications, mean age 59.2 yrs, male 49.6%, 2. poststroke hypertensive patients (CI+AH, n=262, mean age 69.3 yrs, male 50.4%).

Methods: sBP/dBP were monitored every 4-6 weeks, tChol, LDL, HDL, TG, urea, uric acid, smoking, DM, BMI, GF were analyzed before study and at the end of the 3rd and 6th months. All pts treated by monotherapy (Amlodipin/Lizinopril) and their combination.

Results: The group of CI+AH pts were 10 yrs older (p< 0.001) comparing to hypertonics; DM in 13.7% vs. 5.5% (p<0.001), smoking 4.6% vs. 7.5% (p<0.02). After 3 months: significant decrease in sBP, dBP, LDL-chol increased, HDL-chol decreased in all three arms, most significantly in combination therapy. The effect was significantly less marked in CI+AH group comparing to AH (p=0.00001). Different effect was controversially interpreted by cardiologists (not appropriate doses) and neurologists (appropriate doses). In our opinion, this effect reflects compensatory hemodynamic mechanisms, guided (managed) by biological brain computer to prevent brain functions from BP lowering, consequently PP and CBF lowering. Brain „rejected“ significant BP lowering and prefers „gentle“ BP lowering, and „gentle“ BP keeping. Unexpected results: decreased glomerular filtration (p< 0.00001)

Conclusion: Different hypotensive reactions following the same blood pressure lowering drugs, individually/in combination in hypertonics and poststroke hypertensive patients were found. It is interpreted as compensatory hemodynamic reactions in poststroke pts, aiming to keep particularly sufficient blood perfusion to the brain and not lowering blood pressure

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