

the abnormalities of the coagulation/fibrinolytic system that predispose to a procoagulant state.

	Baseline Std		Follow-up Std		t-test
HbA1c (%)	8.57	1.93	8.21	1.78	n.s.
BMI	32.7	4.81	32.81	4.18	n.s.
SBP (mm Hg)	155.78	14.36	134.06	13.56	0.0029
DBP (mm Hg)	88.68	10.52	71.56	8.10	0.0000
Triglycerides (mg/dL)	155.37	66.74	140.63	54.96	n.s.
T-chol (mg/dL)	252.52	40.88	215.08	26.87	0.0300
HDL (mg/dL)	49.05	11.61	50.38	10.77	0.0902
LDL (mg/dL)	166.36	29.82	133.27	27.18	0.0392
T-c/HDL	5.40	1.61	4.46	0.94	0.0062
LDL/HDL	3.60	1.42	2.83	0.92	0.0133
Fibrinogen (mg/dL)	383.62	76.93	335.73	52.64	n.s.
Leukocytes	8,426	2,074	7,090	1,385	0.0836
Platelets 10*3	238.4	66.4	194.5	44.1	0.0609

Key Words: Metformin, Pravastatin, Candesartan

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EFFECTS OF TELMISARTAN ON ARTERIAL COMPLIANCE AND ENDOTHELIAL FUNCTION IN TYPE 2 DIABETES PATIENTS WITH ESSENTIAL HYPERTENSION

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The effects of telmisartan on arterial compliance and endothelial function in subjects with type 2 diabetes suffering from light to moderate essential hypertension were investigated (protocol AZA30003). Twenty patients were randomised into a double-blind, placebo-controlled, 3 week cross-over study to receive either telmisartan (40 mg) or placebo after a 2 week placebo run-in period. The primary endpoint was the effect of telmisartan on arterial distensibility as measured by pulse wave velocity (carotid-femoral route) compared with placebo. Secondary endpoints included the effects of telmisartan on pulse wave velocity (carotid radial route) and further pulse wave analysis including measurements of augmentation index, ejection duration, first and second peak delays, subendocardial viability, brachial and central blood pressures. Insulin resistance and markers of endothelial function were also measured. Telmisartan significantly reduced the pulse wave velocity by the carotid femoral route. The mean adjusted treatment difference was -0.95 m/s (95% confidence intervals: -1.67 , -0.23 m/s, $p=0.013$) in favour of telmisartan. The results of the peripheral and DBP, SBP and pulse pressure were highly significant in favour of telmisartan compared with placebo. Details of these results and those of other secondary analyses will be presented at the meeting. Such findings show that telmisartan is effective at reducing arterial stiffness in hypertensive patients with type 2 diabetes mellitus.

Key Words: Diabetes, Hypertension, Angiotensin Antagonist

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ATENOLOL AND NEVIBOLOL: COMPARATIVE INFLUENCE ON PARAMETERS OF THE CEREBRAL HEMODYNAMIC IN THE PATIENTS WITH ESSENTIAL HYPERTENSION

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With the purpose of assessing the influence of beta 1 – adrenoblockers (β_1 – AB) upon the state of cerebral hemodynamic for the patients with essential hypertension (EH), acute pharmacological test with tenolol (Atenosan, “Sanofi”) and nebivolol (Nebilete, “Berlin Chemie) was performed.

Fifty patients with EH stage 2 complicated with the heart failure (HF) stage 2 were observed. In the 1st group (26 patients) atenolol (50 mg daily) was administered for five days, and in the 2nd group of the patients (24 patients) nebivolol (5 mg daily) was taken for the same period. The condition of the blood supplying of the brain was examined by the

Computer Rheoencephalography (CREG) investigation, which was performed before the treatment, and on the fifth day of β_1 – AB administration.

There were not significant differences in central hemodynamic parameters between the 1st and 2nd group of the patients before the treatment ($p>0.05$). In the basin of a. carotis interna the blood filling was normal ($p>0.05$), the tonus of the main brain vessels and arterioles was increased ($p>0.05$), and the venous outflow was inconvenienced.

The blood filling of the main arteries had grown worse for 22% ($p>0.05$), and the tonus was increased for 17% ($p>0.05$) after atenolol administration. There was fixed a tendency for improvement of these parameters for 7% and 10% ($p>0.05$) respectively after nebivolol administration. Both atenolol and nebivolol administration made the venous outflow uncertainly worse ($p>0.05$) on the fifth day of the acute pharmacological test.

Thus, it is more purposeful and safe to use nebivolol for the treatment of patients with essential hypertension and heart failure complicated with hypertensive dystonia of vertebrobasilar vessels.

Key Words: Atenolol, Nebivolol, Rheoencephalography

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SIDE EFFECTS OF ANTIHYPERTENSIVE TREATMENT WITH CALCIUM CHANNEL ANTAGONISTS

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In order to evaluate side effects (SE) of antihypertensive treatment with calcium channel antagonists (CCA) we studied 2000 patients (62.4 ± 8.1 years old; 1067 men and 933 women) with essential hypertension who received monotherapy with one of the following CCA. Main data are reported in the table: [table] SE of CCA were more often in women ($p<0.00001$) and led them to discontinue their treatment ($p=0.00004$). Women had also more often headache (7.0 vs 4.7% $p=0.03$), flushing (5.6 vs 2.4% $p=0.003$), and exanthema (2.3 vs 1.7% $p=NS$). Attenuation of libido was reported in 9 men (0.45%) and priapism in 3 (0.15%). Constipation was reported in 34 (18.4%) patients who were treated with Verapamil and gingiva hypertrophy in 11 (0.55%) patients treated with dihydropyridines. It is concluded that antihypertensive treatment with CCA often leads to SE because of its vasodilatation, mainly in women.

CCA	SE		discontinuation		edema		headache		flush		exanthema	
	n	%	n	%	n	%	n	%	n	%	n	%
Verapamil	185	35.1	37	20	9	4.9	10	5.4	1	0.5	2	1.1
Diltiazem	163	22.7	23	14	10	6.1	9	5.5	5	3.1	3	1.8
Nifedipine	295	28.5	52	17.6	42	14.2	10	3.4	18	6.1	3	1.0
Nitredipine	128	50.0	42	32.8	37	28.9	20	15.6	15	11.7	3	2.3
Isradipine	159	24.6	24	15.1	13	8.2	11	6.9	14	8.8	8	5.0
Felodipine	426	30.0	59	13.8	69	16.2	29	6.8	13	3.1	14	3.3
Amlodipine	355	30.1	33	9.3	78	22.0	15	4.2	7	2	3	0.8
Lacidipine	244	18.0	21	8.6	14	5.7	11	4.5	5	2	3	1.2
Men	1067	22.7	123	11.5	126	11.8	50	4.7	26	2.4	18	1.7
Women	933	35.3	168	18.5	146	15.6	65	7.0	52	5.6	21	2.3
Total	2000	28.6	291	14.6	272	13.6	115	5.8	78	3.9	39	2.0

Key Words: Side effects, Antihypertensive therapy, Calcium channel antagonists

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SIDE EFFECTS OF ANTIHYPERTENSIVE TREATMENT WITH ACE INHIBITORS

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In order to evaluate side effects (SE) of antihypertensive treatment with ace inhibitors (ACEIs) we studied 1115 patients (55.3 ± 8 years old; 650