

**AMBULATORY LONG-TERM
MANAGEMENT OF HYPERTENSIVES
WITH FIXED COMBINATIONS OF
ANTIHYPERTENSIVE MEDICINES AS A
LINK BETWEEN FAMILY DOCTORS AND
HIGH SPECIALISTS**

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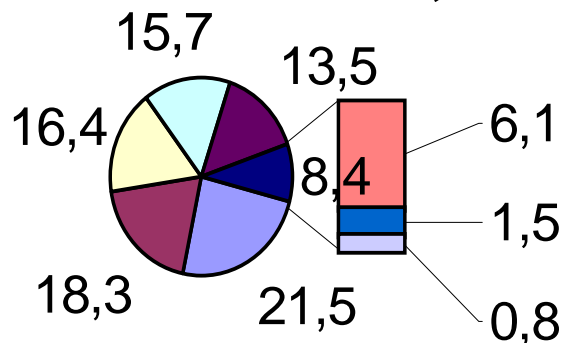
Adherence to (or compliance with) a medication regimen

- **One of key questions of effectiveness of antihypertensive therapy**
- **Even clinical trials report average adherence rates of only 43 to 78 percent among patients receiving treatment for chronic conditions**
- **Of all medication-related hospital admissions in the United States, 33 to 69 percent are due to poor medication adherence**

Methods that can be used to improve adherence

- **4 general categories:**
 - **(1) patient education**
 - **(2) improved dosing schedules**
 - **(3) increased hours when the clinic is open**
 - **(4) improved communication between physicians and patients**

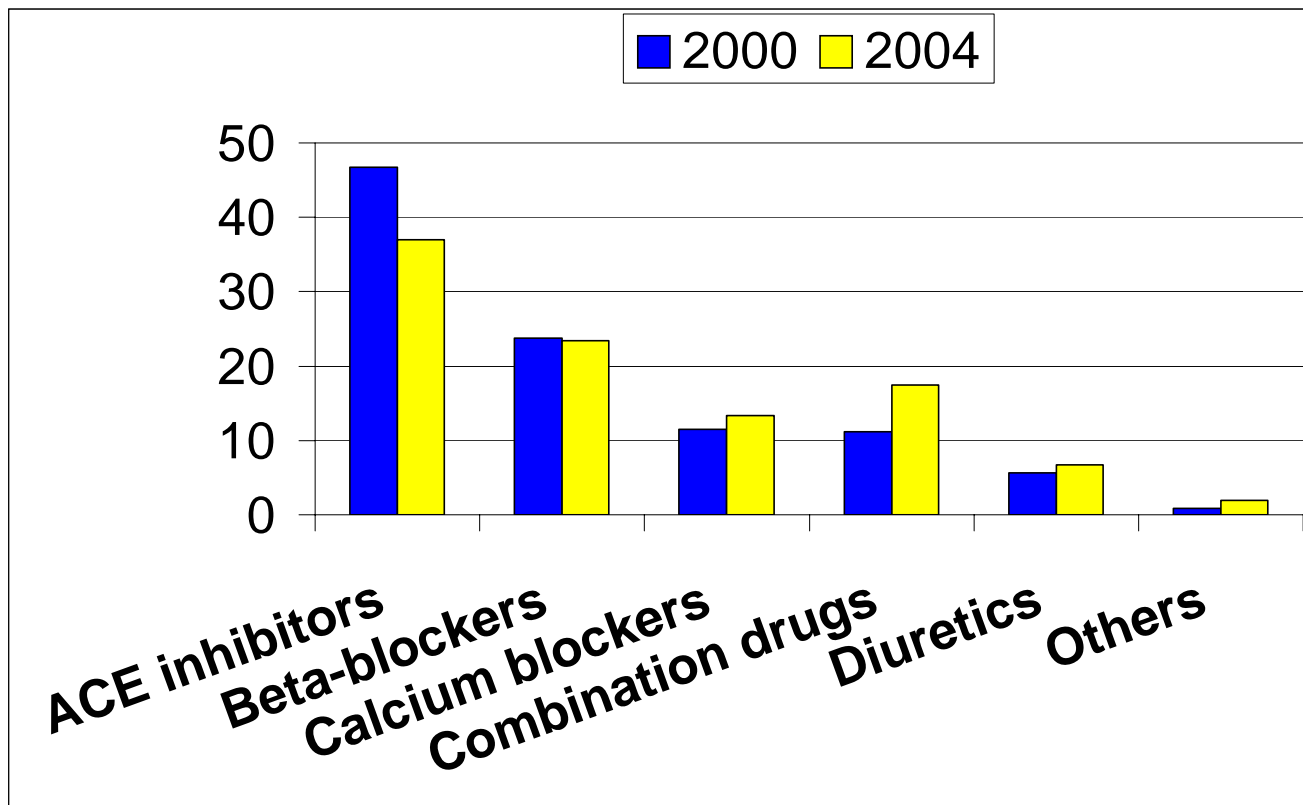
Distribution of antihypertensive drugs in families at home, %



Combination drugs
 Calcium blockers
 Beta-blockers
 alpha-blockers

ACE inhibitors
 Diuretics
 Rauwolfia alkaloids
 Angiotensin II receptor blockers

Results of an interrogation of 194 hypertensives
(120 men, 74 women, mean age 54.5 ± 0.9 years) Bereznyakov I.G. et al., 2001



Personal preferences of the interrogated physicians in prescribing of antihypertensive drugs, % (2000 & 2004 years)

Population studied: workers and employees of Kharkiv tractor factory aged 30-60 years with essential hypertension I-III grades and no comorbidities.

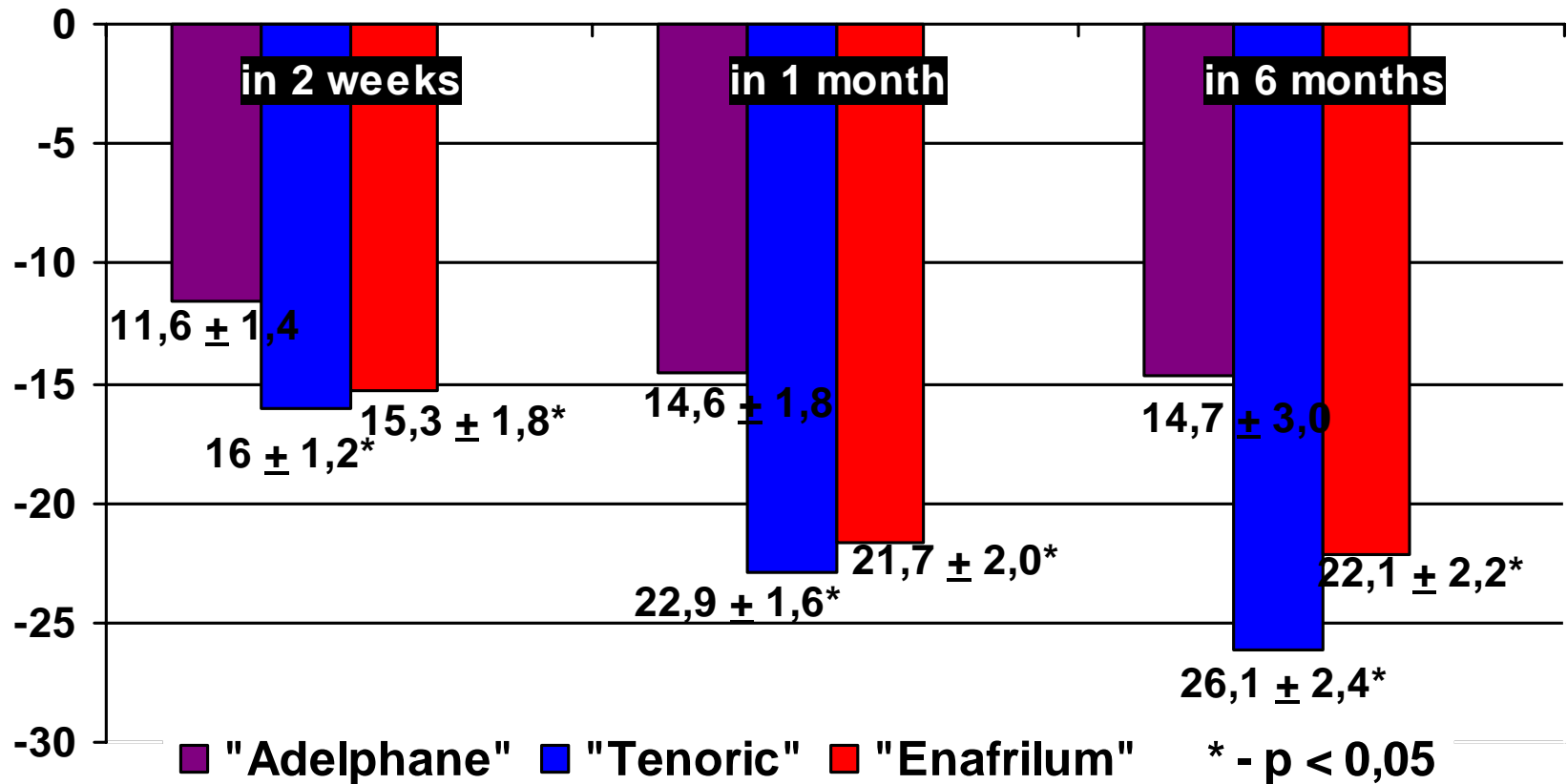
Medicines studied: “**tenoric**” (atenolol 100 mg + chlortalidone 25 mg) IPCA (India); “**enafrilum**” (enalapril 10 mg + hydrochlorothiazide 12.5 mg) Stirol (Ukraine); “**adelphane**” (reserpine 0.1 mg + dihydralazine 10 mg) Ciba-Geigy (India); [**control group:** patients refused to take medicines]

Demographic and baseline characteristics

	No. of patients	Gender, %		Age, years	BMI, kg/m ²	BSA, m ²
		Male	Female			
“ Adelphane ”	31	35,5	64,5	47,5 ± 1,3	28,8 ± 0,8	1,9 ± 0,03
“ Tenoric ”	38	29	71	49,9 ± 0,7	28,5 ± 0,7	1,9 ± 0,02
“ Enafrilum ”	29	34,5	65,5	49,2 ± 0,8	28,8 ± 0,7	1,9 ± 0,03
Control group	33	48,5	51,5	49,3 ± 1,0	27,5 ± 0,7	1,9 ± 0,03
Total	131	36,6	63,4			

BMI: body mass index; **BSA:** body surface area. In right 3 columns all values are mean ± standard error (SE)

Decrease (%) in systolic (I) and diastolic (II) blood pressure between baseline and the following measurements in patients receiving fixed combinations of antihypertensive medicines

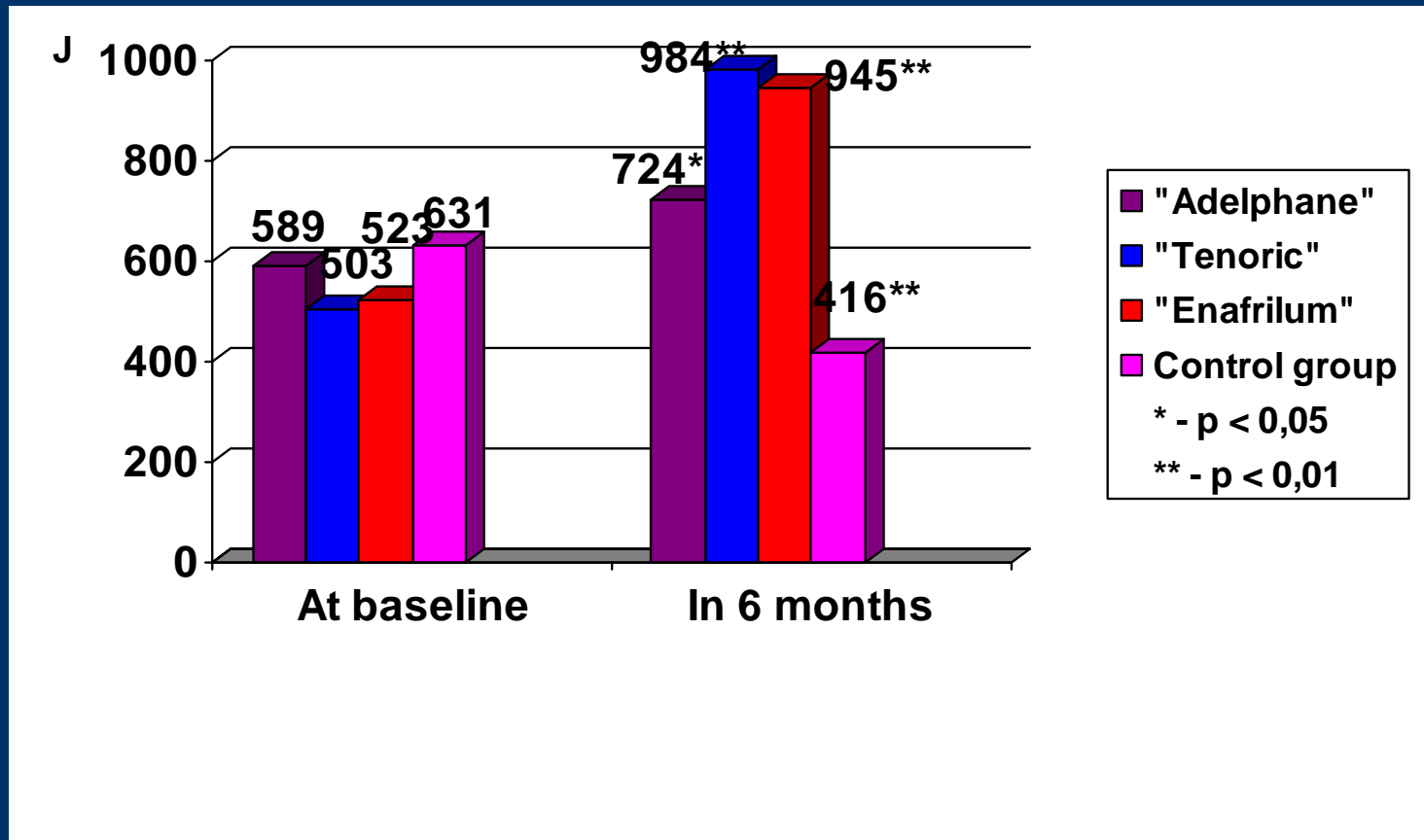


After 6 months' treatment/observation period goal levels of blood pressure (BP) were achieved:

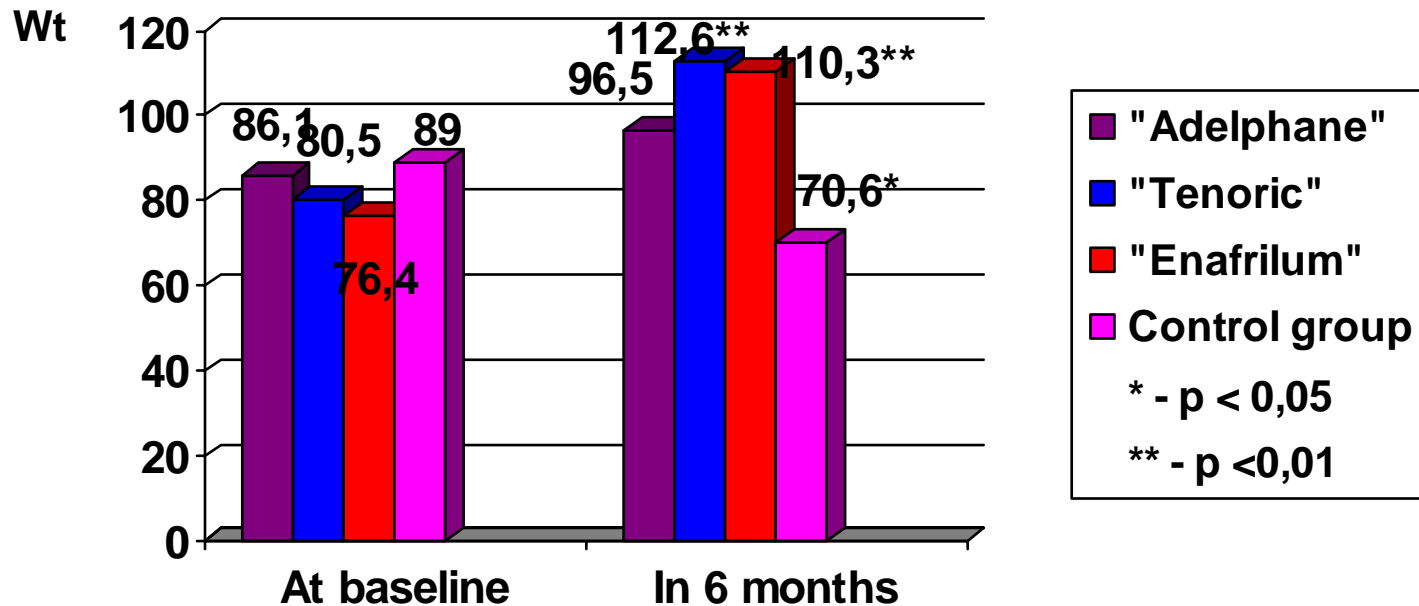
- in 71, 89.5 and 86.2 % of people from adelphane, tenoric and enafrilum groups respectively and no person from control group
- Mean decrease of systolic BP was $21.7 \pm 2.0\%$ in tenoric group, $22.1 \pm 2.2\%$ in enafrilum group and was significantly greater in both groups than in adelphane group ($15.3 \pm 1.8\%$, $p < 0.05$ in both cases)
- Similar results were obtained in relation to diastolic BP: $17.4 \pm 2.2\%$, $18.4 \pm 2.4\%$ and $13.6 \pm 2.0\%$ correspondingly ($p < 0.05$ as comparing with adelphane group).

Dynamics of indices of common work (I) at baseline and after 6 months' period of treatment

(as shown by the method of graded physical load)



Dynamics of indices of threshold load power at baseline and after 6 months' period of treatment (as shown by the method of graded physical load)



Conclusions

- **If hypertensive patient refuses to take medicines, in 6 months it will lead to worsening in tolerability of physical load**
- **From FCAMs tested the most effective ones were tenoric and enafrilum; both of them contained diuretics**
- **Treatment with the least effective FCAM is better than no treatment**

Conclusions

- **10.5-29% of patients from different groups did not reach target BP levels**
- **In cases of clinical failures family doctors should consult high specialists**
- **Possible reasons of ineffectiveness of antihypertensive therapy include:**
 - **inadequate detection of secondary hypertension**
 - **inappropriate combination of antihypertensives**
 - **lack of confidence between doctor and patient, etc.**
- **Help of high specialists can give family doctors an opportunity to reach the best results in management of hypertensive patients and to save high level of adherence to therapy prescribed**