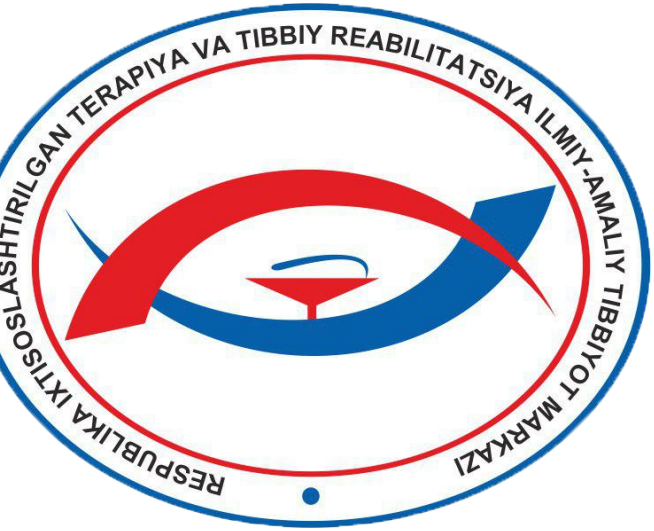
Study of the effectiveness of mineralocorticoid receptor antagonists on neurohumoral parameters with chronic heart failure



Doctor of sciences **Nuritdinov Nuriddin**

Republican specialized scientific-practical
Medical Center Therapy and Medical Rehabilitation
Uzbekistan, Tashkent

AIM

To study the diastolic function of the left ventricle in conjunction with the activity of neurohumoral factors and the comparative effectiveness of AMKR - spirinolactone and eplerenone in patients with CHF.

Research objectives

- To study the relationship between the clinical course and the structural and functional state of the myocardium of the left ventricle in patients with CHF
- To study the level of neurohormones - aldosterone and norepinephrine in patients with CHF and their relationship with indicators of LV diastolic dysfunction;
- To study the comparative efficacy of long-term use of AMKR-spironolactone and eplerenone on the clinical course and indicators of LV diastolic dysfunction;
- To evaluate the comparative effectiveness of long-term use of AMKR - spironolactone and eplerenone on the level of neurohormones in patients with CHF.

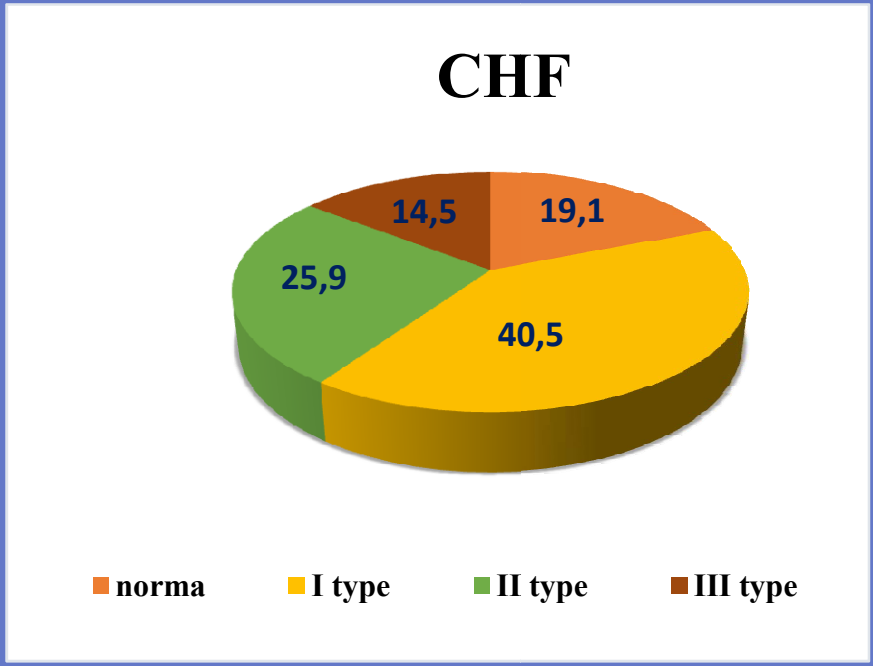
Clinical characteristics of patients

Patient groups	Average age (years)	Duration MI (years)	AH
CHF FC I (n=31)	56,2±4,8	2,1±0,6	24
CHF FC II (n=51)	53,8±4,1	2,4±1,0	38
CHF FC III (n=49)	52,8±3,8	2,0±0,5	35
Control group(n=20)	50,3±4,5		

Research protocol

Research methods	Before	After 6 month
ECG	+	+
Six-minute walk test	+	+
Clinical grade scale	+	+
Echocardiography	+	+

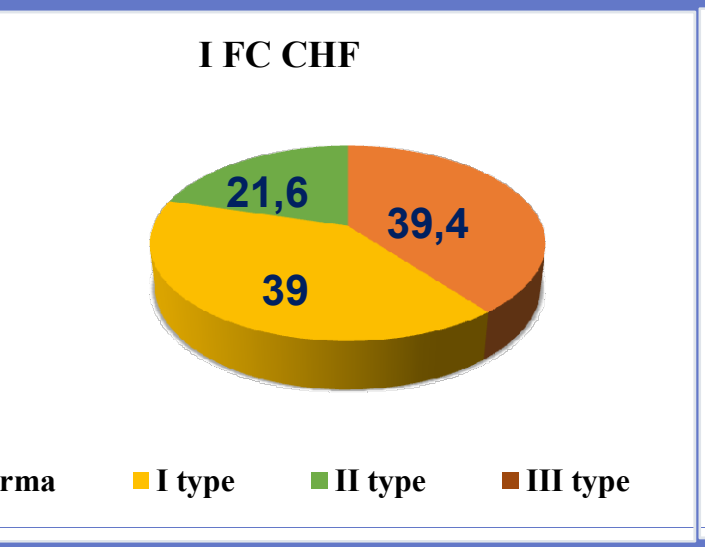
Indicators of diastolic LV function in patients with CHF

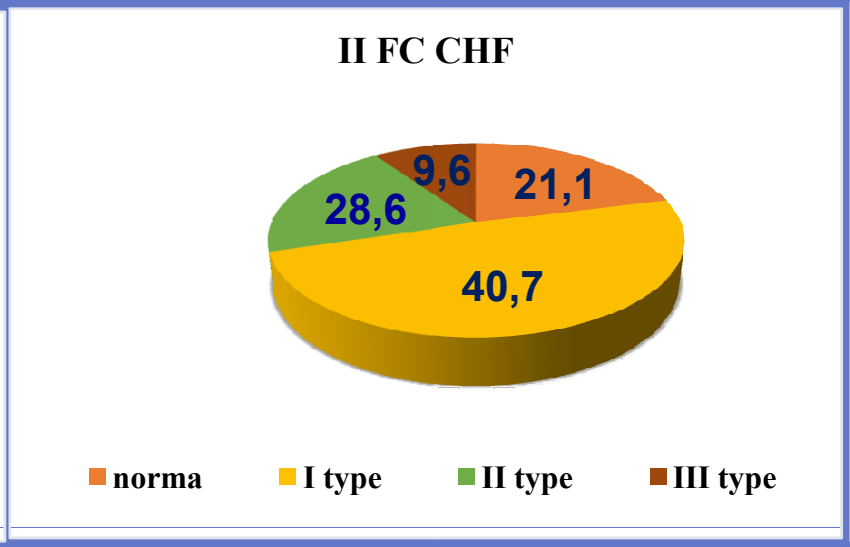


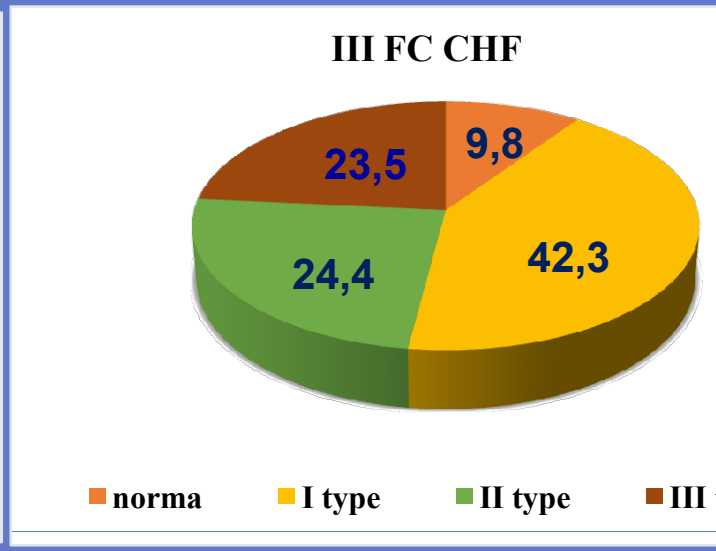
Evaluation of left ventricular diastolic function indicators in conjunction with the clinical course of the disease and cardiac remodeling

Violations of the diastolic function were initially determined in 80.9% (115 patients) of patients with CHF. At the same time, type I (delayed relaxation) was recorded in 40.5% (53 patients), type II - (pseudonormal) in 25.9% (34), type III (restrictive) - in 14.5% (19) patients.

e distribution of types of DDLS in patients with I-III FC CHF (



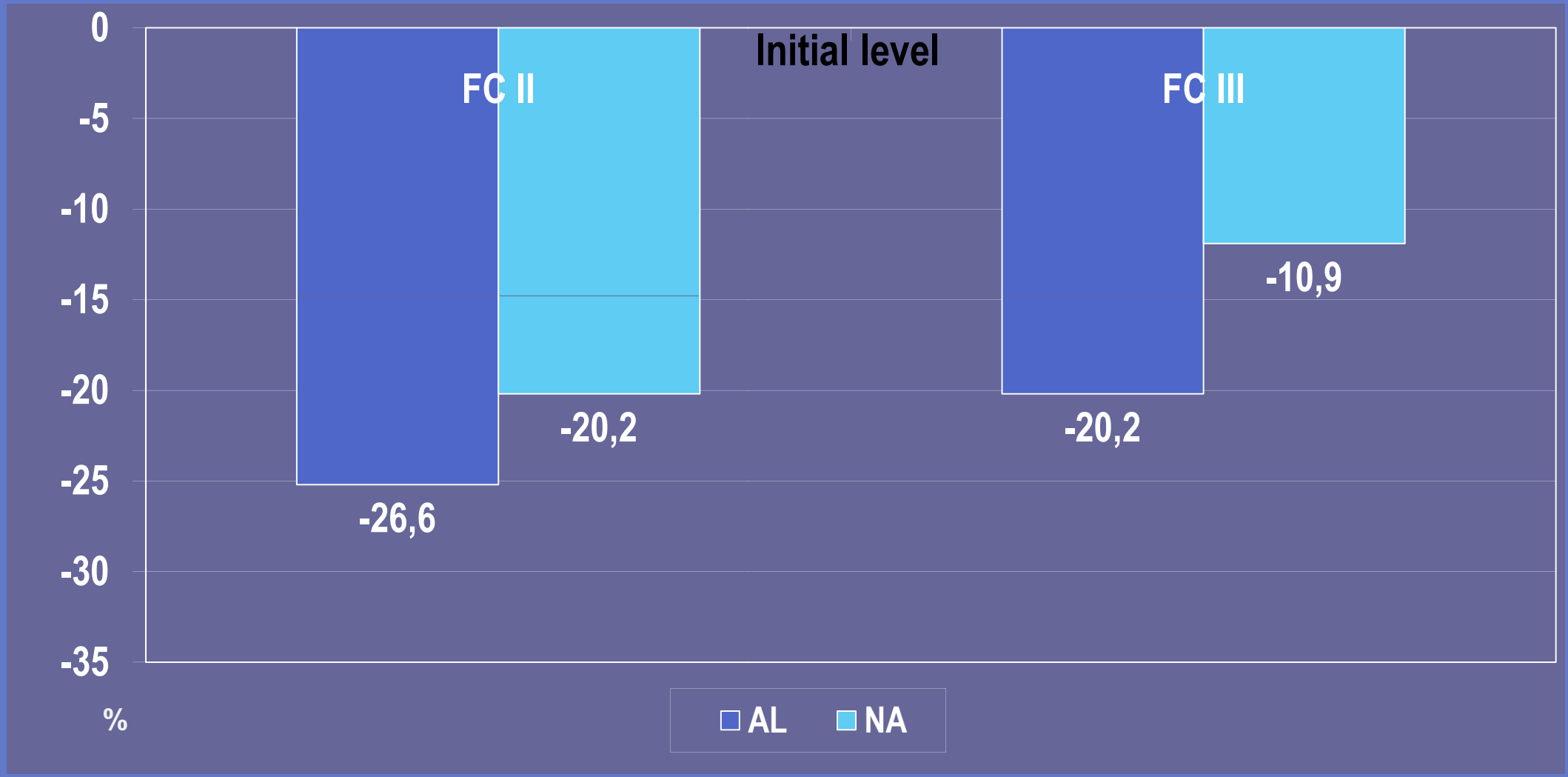




analysis of the types of diastolic dysfunction depending on the CHF FC showed that in patients wi
HF DI, diastolic dysfunction was identified in 58.1% (31) patients, while only type I (delayed
axation) was detected in 12 patients (38.7%), Type II - (pseudonormal) in 6 patients (19.3%). In
tients with II FC CHF, DD was determined in 76.5% (39 patients) of patients: Type I (delayed relaxati
n 22 (43.1%) patients, Type II - (pseudonormal) in 10 (19.6%) patients, type III (restrictive) - in 7 (13.7
tients. In patients with III FC CHF, DD was determined in 81.6% (40 patients) of patients: Type I
elayed relaxation) - in 17 (34.7%) patients, Type II (pseudonormal) in 11 (22.4%) and type III
strictive) - in 12 (24.5%) patients.

100 patients with ischemic heart failure with II and III FC heart failure were examined initially and after 6 months of treatment. To assess the comparative effectiveness of AMRK patients were divided into 2 groups: the first group (I) consisted of 54 patients were taken for 6 months against the background of standard therapy-spirinolactone; the second group (II) -46 patients eplerenone. Dose of spironolactone titrated to 25-50 mg per day (mean dose amounted to 31.5±10,6) disclosure, eplerenone 25-50 mg / day (mean dose was 29.4±11,5).

Changes the level of neurohormones in blood plasma in patients with CHF FC II and III during long-term therapy with spirinolactone



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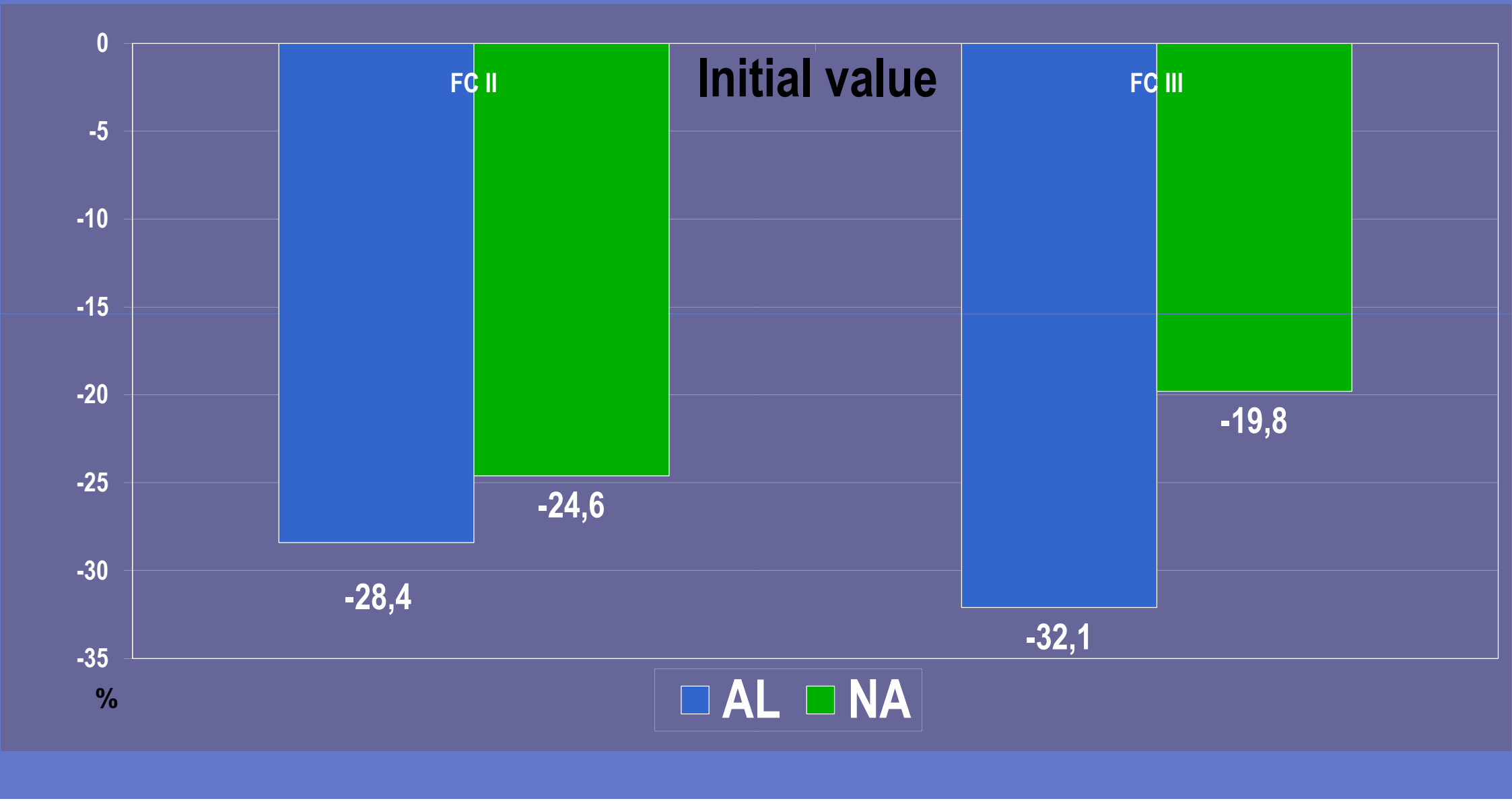
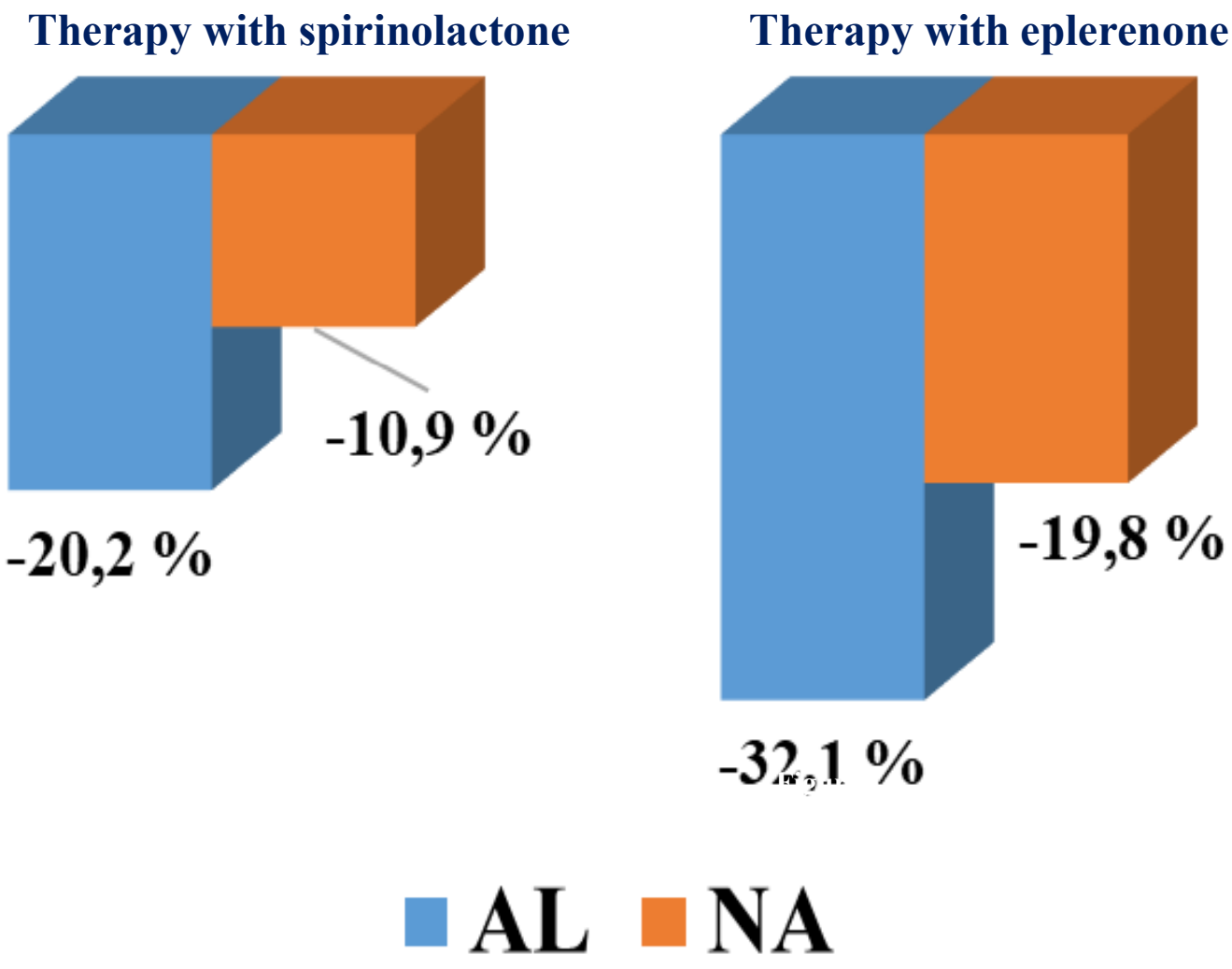


The results of the therapy patients with III FC



Conclusion

Thus, in complex therapy with the use of AMCR in patients with CHF, eplerenone more significantly reduced the level of neurohormones, both in patients with II and III FC CHF.