
INFLUENCE OF FIXED COMBINATION THERAPY AND THE EDUCATIONAL PROGRAM "HYPERTENSION SCHOOL" ON THE QUALITY OF LIFE OF PATIENTS WITH ARTERIAL HYPERTENSION

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Introduction.

Elevated blood pressure is a major contributor to premature death and is responsible for nearly 10 million deaths and more than 200 million disabilities worldwide. SBP level ≥ 140 mm Hg. Art. is associated with an increased risk of mortality and disability in 70% of cases, with the largest number of deaths during the year associated with the level of SBP occurring due to coronary artery disease, ischemic and hemorrhagic strokes [1]. There is a direct relationship between blood pressure levels and the risk of cardiovascular disease (CVD). This connection begins with relatively low values - 110-115 mm Hg. Art. for CAD and 70-75 mmHg. Art. for DAD. A direct relationship between elevated BP and the risk of CV events has been demonstrated for all age [22] and ethnic groups [3]. In patients older than 50 years, SBP is a stronger predictor of events than DBP [2,4. High DBP is associated with an increased risk of CV events and is more frequently elevated in younger (<50 years) patients. DBP tends to decrease in the second half of life due to increased arterial stiffness, while SBP, as a risk factor, becomes even more important during this period [4]. For all treated hypertensive patients, regardless of age or risk, it is recommended that blood pressure be reduced to <140/90 mmHg as the first target. Art., and subject to good tolerance - to the target level of 130/80 mm Hg. Art. or lower due to proven benefits in terms of reducing the risk of cardiovascular complications [5,6,7].

Numerous RCTs have shown that monotherapy effectively lowers BP in only a limited number of hypertensive patients; most patients require a combination of at least two drugs to control BP. A meta-analysis of more than 40 studies showed that the combination of two drugs from any two classes of antihypertensive drugs enhances the degree of BP reduction much more than increasing the dose of one drug. Another advantage of combination therapy is the possibility of physiological

and pharmacological synergy between drugs of different classes, which may not only underlie a more pronounced decrease in blood pressure and better tolerability. Combination therapy also allows you to suppress the counter-regulatory mechanisms of increasing blood pressure. All the advantages of combination therapy are inherent only in rational combinations of antihistamines. In studies of factors associated with the effectiveness of treatment, in recent years, an important place is given to the analysis of the quality of life (QoL) of patients with AH [8,10]. For the doctor, the main criterion for effectiveness will be the achievement of target blood pressure. However, if a patient notes a worsening of QoL during therapy, then his assessment of therapy may be negative, which cannot but be reflected in the level of adherence to medication. QoL parameters have independent prognostic significance and are no less important factors for predicting survival than general somatic status [9,11,12]. The largest number of studies in medicine studying the effect of various treatment methods on QoL was performed in cardiology [9, 11, 12]. A wide coverage of persons with AH with dispensary observation and their education in Schools of Health for those with AH can significantly improve the quality of life of such patients due to more thorough medical supervision - regular visits to doctors and correction of ongoing therapy, the opportunity to ask the doctor questions of interest to them and receive a brief or in-depth individual preventive counseling on risk factors.

Purpose of the study.

To study the effectiveness of fixed combination antihypertensive therapy and the impact of the educational program "School of hypertension" on the quality of life of patients with arterial hypertension in patients with AH I-II degree in a polyclinic.

Material and research methods.

The study included 610 patients with 1-2 degree hypertension, observed in a 37-family polyclinic in Tashkent at the age of 35-65 years with newly diagnosed hypertension or taking irregularly antihypertensive drugs during the last month. During the study of patients, a complete history was taken, a physical examination was performed, blood pressure was measured using the Korotkov method. Using the questionnaire, risk factors for hypertension (hereditary predisposition for hypertension, bad habits: smoking, alcohol, overweight, excessive salt intake) were identified. The duration of AH was 6.8 ± 1.6 years. Of the 610 patients examined, 231 (37.9%) were patients with stage I AH (mean age of patients was 46.7 ± 7.0 years) and 379 (62.1%) - with stage 2 AH (mean age 49.1 ± 6.92 years). Patients with grade

1 hypertension started taking 5 mg of enalapril per day as monotherapy (Enap, KRKA, Slovenia). Patients with grade 2 hypertension were divided into 2 groups based on risk stratification. Group 1 (medium risk) took 10 mg of enalapril per day, group 2 (medium and high risk) started taking enalapril 12.5 mg with hydrochlorothiazide fixed combination - Enap HL. After 4 weeks, if the target level of blood pressure was not reached ($<140/90$ mm Hg), the dose of Enalapril was doubled (20 mg / day). If monotherapy with enalapril did not allow reaching the target level of blood pressure, then after 2 weeks, Enap HL was prescribed. The criterion for the effectiveness of antihypertensive therapy was a decrease in DBP by 10% or SBP by 10 mm Hg. Art. - 15 mm Hg. Art. from the original level. The target level of blood pressure during therapy was considered to be the achievement of blood pressure $< 140/90$ mm Hg. Art. [4,5]. All patients who achieved the target level of blood pressure or an adequate antihypertensive effect (a decrease in systolic blood pressure (SBP) and / or diastolic blood pressure (DBP) by less than 10% of the baseline) after 6 weeks of treatment continued to participate in the study for another 24 weeks. At all visits, patients were monitored for blood pressure, heart rate, patient complaints were recorded, side effects and adverse events, if any, were noted, biochemical analysis, electrocardiography (ECG) in 12 leads were performed at baseline and after 12, 24 weeks of treatment. The exclusion criteria were secondary forms of hypertension, acute cerebrovascular accident, acute myocardial infarction within the last 6 months, angina pectoris II-III FC, heart failure, cardiac arrhythmias, liver and kidney dysfunction.

Research results.

When studying the quality of life of 493 patients with hypertension using questionnaires, it was found that the examined patients showed a decrease in all components of the quality of life parameters (physical, social). It is noted that the criteria of quality of life associated with the psychological environment turned out to be the most influential. In 143 patients with grade 1 AH and 146 patients with AH II, when assessing the quality of life, a decrease in such parameters as physical activity (FA) and emotional state (ES) was revealed, and the total indicator was -9.0 ± 0.41 points. After 24 weeks, reassessment of QoL using questionnaires revealed the following changes: an improvement in the quality of life of patients and a decrease in various restrictions associated with the need for treatment, an increase in daily life and work activity, and an improvement in relationships with others. The total indicator of quality of life in the examined patients increased from -9.0 ± 0.41 to -5.7 ± 0.25 points ($P < 0.001$), there was an improvement in indicators: A by

30%, ES by 29.6%, energetic (E) by 27.6%, social adaptation (SA) by 29.7%, respectively, the total indicator of quality of life increased by 1.6 times, i.e. 36.5%. When analyzing the changes in this indicator depending on the degree of AH in monotherapy with enalapril in patients with AGI degree, there was an increase in the QOL index from -7.8 ± 0.39 points to -5.1 ± 0.21 ($P < 0.001$), which amounted to an increase of this total indicator by 34.6% compared with the baseline, there was also an improvement in FA by 32.5%, ES by 35.16%, E by 35%, SA by 33.4%, an increase in the total QOL index was 34, 6%. In patients with grade II hypertension, these indicators had the following dynamics: if before treatment this indicator was equal to -10.1 ± 0.42 , then after treatment it increased to -7.2 ± 0.27 ($p < 0.001$), the total QoL index increased by 28.7%; also, the increase in FA was 27.5%, ES 25%, E 24%, SA 26%. The improvement in the total QoL index was 28.7%. As a result of six-month therapy with a fixed combination of enalapril with hydrochlorothiazide, the increase in QOL was the most pronounced and amounted to -6.2 ± 0.33 , compared with the baseline -9.7 ± 0.38 ($p < 0.001$), there was also an increase in indicators compared to with initial indicators: FA by 38%, ES by 34.9%, E by 35.2%, SA by 34.7%. Accordingly, the total QOL index increased by 36.1% ($p < 0.001$). In patients with grade I hypertension, this indicator increased from -8.3 ± 0.41 to -5.4 ± 0.36 ($P < 0.001$), and an increase in other indicators was also noted: FA by 35%, ES by 30.7%, E by 34%, SA by 31.4%; the increase in the total QoL index was 34.9%. Similar changes were observed in patients with II degree AH: the total QOL index increased by 31.3%, the QOL index increased from 9.9 ± 0.32 points to -6.8 ± 0.27 ($P < 0.001$). In patients with arterial hypertension stage II there was an increase in this indicator: from -9.9 ± 0.32 to -6.8 ± 0.27 ($P < 0.001$). The increase in other indicators was: FA 41%, ES 39.1%, E 36.1%, SA 38.1%, the increase in the total QOL index was 31.3%. The study of the QOL indicators of patients participating in the training program "School of Hypertension" revealed that taking antihypertensive drugs (AHP) and educating patients about risk factors for the disease leads to a significant increase in the following indicators: the QOL indicator increased from -9.5 ± 0.24 to -4.5 ± 0.13 points. The study of the quality of life of patients who attended training programs showed that taking AHT and the emergence of patients' concepts of risk factors for hypertension led to a significant improvement in the following indicators: QOL from -9.5 ± 0.24 to -4.5 ± 0.13 and FA by 45.2%, ES by 44.2%, E by 45%, SA by 47.7%. This, in turn, led to an increase in the total index (SI) of QoL by 52.7%. When analyzing these indicators according to the degree of hypertension, an increase in the QoL index in patients with grade I hypertension

from -8.2 ± 0.36 to -4.0 ± 0.16 points was noted. The total QoL index increased to 51.2% ($P < 0.001$). All these changes led to a significant increase in the total QoL index by 52.7% ($P < 0.001$). When analyzing the dependence of these indicators on the degree of AH, it was found that in patients with AH I stage there was an increase in: FA by 51.7%, ES by 45.7%, E by 47%, SA by 50.3%, compared with the initial indicators, an increase total QoL index was 51.2%. The dynamics of the above indicators in patients with II degree AH looked as follows: the increase in QOL was from -9.7 ± 0.32 to -4.8 ± 0.18 ; 43%, SA by 45.7% and total QoL index by 50.6% (Figure 1). We found that after training at the "School of Hypertension" in patients with AH of the first degree, there was an increase in FA, SA and total QOL, which were highly significant (Figure 2).

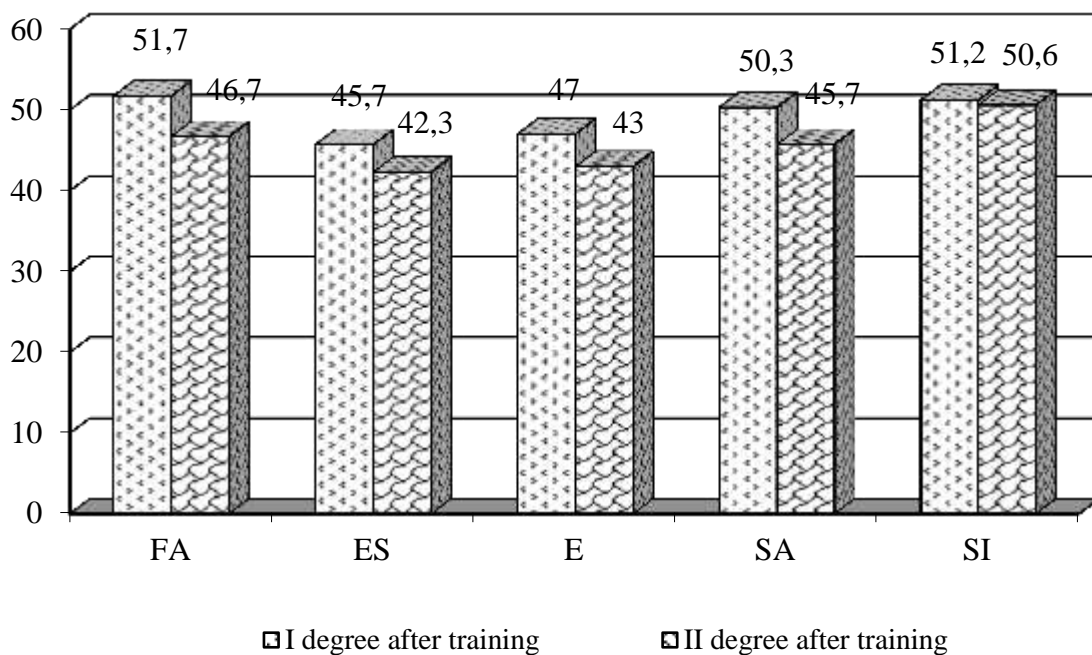


Figure 1. Indicators of QoL in patients with AH of I and II degrees after training at the school of hypertensive patients

We found that after training at the "School of Hypertension" in patients with AH of the first degree, there was an increase in FA, SA and total QOL, which were highly significant (Figure 2).

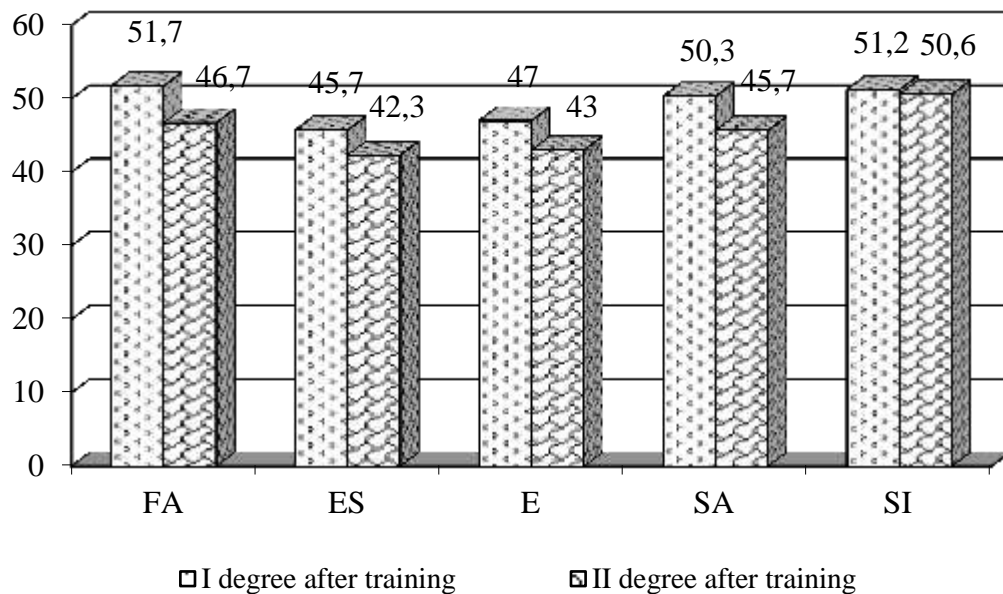


Figure 2. Changes in the quality of life indicators of patients with stage I hypertension after training at the "School of Hypertension"

Similar significant changes in QoL were noted in the group of patients with II degree AH.

Conclusion. Thus, the assessment of the quality of life of patients with hypertension showed that the quality of life of patients is reduced mainly on the scales of physical activity, emotional state and social adaptation. Achieving the target level of hypertension with the help of antihypertensive drugs leads to an improvement in the quality of life, and the education of patients in the "schools of hypertensive patients" along with an increase in the quality of life improves the indicators of physical activity and social adaptation. STEP is an effective method of secondary prevention of arterial hypertension, making it more "manageable", as it helps to prevent the development of complications of this disease and increase patient adherence to treatment. This ultimately leads to a decrease in the disability of the population.

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