



EFFECTIVENESS OF COMBINED MEDICAL THERAPY IN THE TREATMENT OF ARTERIAL HYPERTENSION ASSOCIATED WITH DYSLIPIDEMIA

Ochilova Dilorom Abdukarimovna

Bukhara State Medical Institute, Department of Physiology, Uzbekistan

Rakhmonqulova Nargiza Gafurovna

Bukhara State Medical Institute, Department of Physiology, Uzbekistan

Resume

Relevance: Arterial hypertension (AH) and the various metabolic disorders associated with it are one of the most important problems in the focus of modern medical science and the health care system [12]. According to the WHS, 20-30% of the population of the planet has AH [4]. AH is the second leading cause of death from cardiovascular disease after IHD [13]. According to a number of studies in Japan, Uzbekistan and Finland, the development and course of AH are closely linked to important factors such as dyslipidemia, nervous tension, excessive salt intake, overweight, age, gender, impaired glucose tolerance. Disorders of lipid metabolism are several times more common in people with AH [1]. Dyslipidemia is one of the main risk factors in the development of cardiovascular disease [7]. Numerous epidemiological studies have found a clear association between AH and lipid metabolism disorders [8]. Patients with lipid metabolism disorders have higher resistance to arterial hypertension. In some populations, the prevalence of lipid metabolism disorders, particularly hypercholesterolemia, reaches 60% [11]. It was noted that lipid metabolism disorders were significantly higher among patients with HA [18].

Purpose: Selection of effective antihypertensive drugs in the treatment of hypertension in patients diagnosed with dyslipidemia.

Materials and Methods: The study involved 150 patients aged 20-69 years with hypertension. Blood lipid metabolism were determined in all patients, as well as daily monitoring of blood pressure. Patients with dyslipidemia were divided into different groups and the effectiveness of antihypertensive drugs was studied. In addition to antihypertensive therapy, all patients were prescribed standard non-pharmacological treatment (correction of existing risk factors) and adjuvant therapy (hypolipidemic and antiaggregant) [2].





20 mg of rosuvostatin (Mertenil-Gideon Richter, Hungary) and 75 mg of acetylsalicylic acid (thrombopol-Polpharma, Poland) were prescribed as hypolipidemic treatment and antiaggregant. When prescribing drugs to patients, it was taken into account that there are indications for the use of drugs of this group and no contraindications.

Results and Analysis: In the treatment of patients, the spectrum of lipids in the blood and daily monitoring of blood pressure were re-determined before therapy and after 10 days of therapy (because inpatient treatment was 10 days). Although it is difficult to correct the amount of lipids in the blood in the short term, we have tried to draw conclusions by redefining the transport forms of lipoproteins i.e. lipids. [10]. From the analysis of the above results, it can be concluded that normodipine is the most effective drug in the adequate correction of blood pressure in arterial hypertension accompanied by dyslipidemia. Norticosteroids and normodipine were found to be more effective in correcting lipoprotein levels. Diroton was also found to be relatively effective. Bidop and thiazide diuretics have been shown to be less effective than other drugs. In addition, 38 patients with 2-3 levels of AG were divided into the following combination hypotensive therapy groups in order to rule out an effective combination of antihypertensive drugs in the patient. Separation The most effective combinations were selected based on the European Society of Cardiology (ESC) 2013 AG treatment recommendations.

Group 1 - thiazide diuretics and calcium antagonists: hypothiazide 25 mg (Sanofi aventis) + normodipine 5 mg (Gideon-Richter)

Group 2 - thiazide diuretics and beta blockers: hypothiazide 25 mg (Sanofi aventis) + bidop 5 mg (Gideon-Richter)

Group 3 - thiazide diuretics and AOFI: hypothiazide 25 mg (Sanofi aventis) + diroton 5 mg (Gideon-Richter)

Group 4 - thiazide diuretics and angiotensin II receptor blockers: hypothiazide 25 mg (Sanofi aventis) + nortivan 80 mg (Gideon-Richter)

Group 5 - diroton and calcium antagonists: diroton 5 mg (Gideon-Richter) + normodipine 5 mg (Gideon-Richter) or equatorial fixation combination (lisinopril + amlodipine, Gideon-Richter)

Group 6 - angiotensin II receptor blockers and calcium antagonists: nortivan 80 mg (Gideon-Richter) + normodipine 5 mg (Gideon-Richter)





In addition to antihypertensive therapy, all patients were prescribed standard non-pharmacological treatment (correction of existing risk factors) and adjuvant therapy (hypolipidemic and antiaggregant). 20 mg of rosuvostatin (Mertenil-Gideon Richter, Hungary) and 75 mg of acetylsalicylic acid (thrombopol-Polpharma, Poland) were prescribed as hypolipidemic treatment and antiaggregant. When prescribing drugs to patients, it was taken into account that there are indications for the use of drugs of this group and no contraindications. Based on the results of the study, it can be said that the most alternative drugs that can achieve effective correction of blood pressure and blood lipid levels are normodipine 5mg + nortivan 80mg, and normodipine 5mg + diroton 5mg. The remaining combinations are an irrational choice in correcting the amount of lipids in the blood in AH with dyslipidemia. A combination of AHM and hypolipidemic drugs was also evaluated in patients with AH with dyslipidemia in AH monotherapy. Learns to produce a free combination of drugs and a combination of fixation when a combination treatment is produced. In separate groups, a drug containing a fixative combination of normodipine and atorvastatin (5 mg amlodipine and 20 mg atorvastatin, Gedeon-Richter, Hungary) and free doses of these drugs were 5 mg of normodipine and 20 mg of mertenil (pharon-information company). The results showed that in patients receiving a fixation combination of drugs, a decrease in normal parameters of lipid metabolism products and effective control of blood pressure recorded higher numbers than in patients treated in a free combination. Selecting an effective drug to control AH with dyslipidemia can present a number of challenges for physicians. In our study, groups of drugs that were considered effective in the effective control of AH and the correction of risk factors associated with dyslipidemia were identified. It can be said that in any case, non-drug methods aimed at correcting risk factors are a priority of therapy. Our studies have also shown that the effective drugs for AH in monotherapy with dyslipidemia are the нормодипин 5мг+ нортиван 80мг drugs. We found that thiazide diuretics were not effective enough to correct blood lipid levels. Our research has shown that the combination of normodipine 5mg + nortivan 80mg, normodipine 5mg + diroton 5mg in combination therapy is a very alternative drug. It should be noted that adjuvant therapy in the treatment of HD-antiaggregant and hypolipidemic therapy should be given to all patients, regardless of the stage of the disease, AH level and risk group. A retrospective analysis of 70 lactating women was carried out according to a specially compiled questionnaire in the obstetric complex Bukhara region Karakul district in women with obesity and dyslipidemia, this condition affects uterine involution [17-19].





Conclusion

In any case, non-pharmacological methods aimed at the correction of risk factors in the effective control of AH accompanied by dyslipidemia and the correction of risk factors remain a priority of therapy. Effective drugs for AH with dyslipidemia in monotherapy are groups of normodipine 5mg + nortivan 80mg. Thiazide diuretics and Duplekor-atorvastatin 20 mg + amlodipine 5 mg are not effective in correcting blood lipids. In combination therapy, the combination of normodipine 5mg + nortivan 80mg, normodipine 5mg + diroton 5mg is an effective combination. It should be noted that adjuvant therapy-antiaggregant and hypolipidemic therapy in the treatment of HD should be given to all patients, regardless of the stage of the disease, AH level and risk group. The fixative combination of hypotensive and hypolipidemic drugs is more effective than the free combination

Literature

1. Павлова О.С. Современные возможности эффективной сердечно-сосудистой профилактики у пациентов с артериальной гипертензией и дислипидемией. Мед. новости. 2012; 1: 62–68.
2. Артериальная гипертония, нарушения липидного обмена и атеросклероз. В.В. Кухарчук. В «Руководство по артериальной гипертензии» / Под ред. Е.И.Чазова, И.Е.Чазовой. М.: Медиа Медика, 2005; 289–299.
3. Klahr S., Morrissey J.J. The role of vasoactive compounds, growth factors and cytokines in the progression of renal disease. *Kidney Int.* 2000; 57; Suppl 75: 7–14.
4. Wolf G. The Renin-Angiotensin System and Progression of Renal Disease. Jn: *Contributions to Nephrology.* Editor G. Wolf. 2001.
5. Delcayre C., Swynghedauw B. Molecular mechanisms of myocardial remodelling. The role of aldosterone. *J. Mol. Cell. Cardiology.* 2002; 34: 1577–1584.
6. Ross R. Atherosclerosis an inflammatory disease. *N Engl J Med.* 2009; 40:115–26.
7. O'Donnell VB. Free radicals and lipid signaling in endothelial cells. *Antiox Redox Signal.* 2003; 5: 195–203.
7. Wolfrum S., Jensen K.S., Liao J.K. Endothelium-dependent effects of statins. *Arterioscler Thromb Vasc Biol.* 2003; 23: 729–36.
8. Kaplan M., Aviram M. Oxidized low density lipoprotein: atherogenic and proinflammatory characteristics during macrophage foam cell formation. An inhibitory role for nutritional antioxidants and serum paraoxonase. *ClinChem Lab Med.* 1999; 37: 777–87.





9. Campese V.M., Bianchi S., Bigazzi R. Association between hyperlipidemia and microalbuminuria in essential hypertension. *Kidney Int.* 1999; 56 (Suppl 71): S10
10. Диагностика и лечение артериальной гипертензии. Системные гипертензии. 2010; 3: 5–26.
11. Ощепкова Е.В., Дмитриев В.А., Титов В.Н. и соавт. Показатели неспецифического воспаления у больных гипертонической болезнью. *Тер. Арх.* 2007; 12: 18–25.
12. Breiser A., Recinos A., Eledrisi M. Vascular inflammation and the renin-angiotensin system. *Atheroscler. Thromb Vasc. Biol.* 2002; 22: 1257–1266.
13. Verma S., Bucshanan M., Anderson T. Endothelial function testing as a biomarker of vascular disease. *Circulation.* 2003; 108: 2054–2059.
14. Sesso H., Burning J., Rifai N. et al. C-reactive protein and the risk of developing hypertension. *JAMA.* 2003; 290: 2945–2951.
15. Niskanen L., Laaksonen D., Nyysönen K. et al. Inflammation, abdominal obesity and smoking as predictors of hypertension. *Hypertension.* 2004; 44 (6): 859–865.
16. ARTERIAL HYPERTENSION STATISTICS AT THE LEVEL OF PRIMARY HEALTH CARE IN THE CITY OF BUKHARA OCHILOVA DILOROM ABDUKARIMOVNA, USMONOV ULUG'BEK RIZOYEVICH. *INTERNATIONAL JOURNAL ON HUMAN COMPUTING STUDIES.* Volume: 02 Issue: 6 November-December 2020
17. Ochilova Dilorom Abdugarimovna , Komilova Baxmal Odilovna Sobirov Shohruh Husenovich, Rakhmonkulova Nargiza Gafurovna .Characteristics Of The Manifestation Of Hypertension In Patients With Dyslipidemia
18. Rakhmonkulova Nargiza Gafurovna.Characteristic of reproductive function restoration nursing mothers. 3 rd International Multidisciplinary Scientific Conference on Ingenious Global Thoughts
19. D. A. Ochilova , N. G. Rakhmonkulova, Sh. H. Sobirov. Features of the Course of Hypertension Disease in People with Dyslipidemia. *American Journal of Medicine and Medical Sciences* 2020, 10(2): 77-80
19. Rakhmonkulova Nargiza Gafurovna .Ultrasound examination of the restoration of reproductive function in women who underwent a cesarean section . *Galaxy International Interdisciplinary Research Journal* 10 (1), 195-198

