



Lipid Spectrum Disorders in Patients with Psoriatic Arthritis

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Abstract: Psoriatic arthritis (PA) is a chronic, inflammatory disease of the joints, spine, and entheses, usually associated with psoriasis, belonging to the group of seronegative spondyloarthritis. Psoriatic arthritis is characterized by a chronic progressive course, leading to erosion of the articular surfaces, multiple intra-articular osteolysis, joint ankylosing, sacroiliitis and spondylitis, and is also accompanied by systemic disorders [1].

Keywords: Patients, spine.

Introduction. Psoriatic arthritis (PA) is a chronic, inflammatory disease of the joints, spine, and entheses, usually associated with psoriasis, belonging to the group of seronegative spondyloarthritis. Psoriatic arthritis is characterized by a chronic progressive course, leading to erosion of the articular surfaces, multiple intra-articular osteolysis, joint ankylosing, sacroiliitis and spondylitis, and is also accompanied by systemic disorders [1].

Psoriatic arthritis is one of the main forms of inflammatory diseases of the joints and spine. The prevalence of psoriasis worldwide is 2-3%, and the prevalence of arthritis in patients with psoriasis, according to individual authors, ranges from 13.5 to 47.5% [1,4]. Myocardial infarction and cerebral strokes are the causes of premature mortality in these immune-inflammatory diseases. The accelerated development of atherosclerosis is a kind of systemic manifestation of these diseases. This is explained by the persistence of a chronic inflammatory process, which plays a leading role in increasing cardiovascular morbidity in many diseases, in the pathogenesis of which autoimmune disorders play a role [2].

Despite the advances made in recent years in the treatment of arthritis, the mortality rate in patients with diseases of the musculoskeletal system is still high. Thus, the mortality rate in patients with psoriatic arthritis (PA) exceeds the average population level by 59% in women and by 65% in men, and the main cause of death in these patients is cardiovascular accidents [3,4]. Currently, there are few works devoted to explaining the reasons for the increase in cardiovascular mortality in PA compared with the general population, and therefore the study of this problem is of undoubted scientific and clinical interest. The increase in cardiovascular morbidity and mortality in patients with PA can be explained both by the "accumulation" of classical cardiovascular risk factors and the influence of persistent systemic inflammation on the development of the atherosclerotic process.

In connection with the above, the study of the features of dyslipidemia as one of the main factors of cardiovascular risk in patients with PA, as well as the relationship of dyslipidemia with other traditional factors of cardiovascular risk and the activity of systemic inflammation, is undoubtedly relevant [1,5]. Violations of fat metabolism in psoriasis are of great importance, and some researchers considered this disease in the framework of skin lipoidosis. In psoriasis, there is not only an increase in lipids in the blood serum, but also their accumulation in the skin.

A significant increase in total lipids, free fatty acids, triglycerides (TG), along with an increase in phospholipids, free cholesterol and its esters, according to some authors, is associated with the stage of the skin process. It has been shown that hyperlipidemia usually precedes the manifestation of

psoriasis. Significant disturbances in fat metabolism in psoriasis and PA lead to the early development of atherosclerosis, and, accordingly, to coronary artery disease [3,6]. Fat metabolism disorders are detected already at the early (subclinical) stage of psoriasis and PA.

Material and research methods. The study was conducted on the basis of the regional multidisciplinary medical center in the department of rheumatology in Bukhara. The study included the study of dyslipidemia and the effect of inflammation on its development in 50 patients with PA aged 19 to 80 years (mean age 52.2 ± 1.9), 29 women and 21 men. The duration of PA ranged from 1 to 17 years. In the course of the study, a polyarthritic variant of the articular syndrome was detected in 28 patients, oligoarthritic - in 14, spondyloarthritic - in 8. In all patients, total cholesterol (OH, mmol/l), high-density lipoprotein cholesterol (HDL, mmol/l), lipoprotein cholesterol were determined low density (LDL, mmol / l), very low density lipoprotein cholesterol (VLDL, mmol / l), as well as the level of blood triglycerides (TG, mmol / l). According to the formula A.N. Klimov, the atherogenic index (AI) was calculated: $(OH-HDL)/HDL$. The level of TC less than 5.0 mmol/l was considered desirable or normal, mild hypercholesterolemia - TC from 5.0-6.5 mmol/l, moderate hypercholesterolemia - TC 6.5-7.8 mmol/l, severe hypercholesterolemia - TC more than 7.8 mmol/l. The level of HDL was considered normal at a level of more than 1.0 mmol/l for men and more than 1.1 mmol/l for women. Values less than 2.0 mmol/l were considered normal TG levels [4]

Research results and discussion. In all patients, the level of cholesterol, triglycerides, HDL cholesterol, LDL cholesterol was determined. An increase in cholesterol levels was noted in 78.8% of patients with PA and in 52.3% of the control group (mean level 5.9 ± 1.05 and 4.97 ± 0.69 , respectively, $(p=0.01)$). LDL-C level was detected in 85.9% of patients with PA and in 62.5% of healthy individuals, and the average values were $3.76 + 0.87$ and $3.33 + 0.7$ ($p = 0.05$). the average level of HDL cholesterol was $1.45 + 0.4$, and the level of TG was $0.88 + 0.21$, which did not differ statistically from their values in healthy individuals.

Conclusions. Thus, in patients with PA, the most common is combined hyperlipidemia, which is expressed in an increase in TC, LDL, VLDL and TG.

Literature

1. Rheumatology: National guidelines / under. ed. E. JI Nasonova, 2008; Gladman D. et al., 2002; Toussirot E., Wendling D. et al., 2005.
2. Psoriatic arthritis // Clinical guidelines: Rheumatology / Ed. E.L. Nasonov. Moscow: GEOTAR-Media,
3. Molochkov V.A. Psoriasis and psoriatic arthritis / - V.A. Molochkov, 2007. - 197 p.
4. Correlation of lipid parameters to the severity of psoriasis // A. Colsman, M. Brugel, J. Thiery, [et al.]- 1st World Psoriasis and psoriatic arthritis conference 2006. Abstract. - Stockholm, 2006. - Vol. 36.-P.53.
5. Zhuraeva Kh. I., Badridinova B. K. The frequency of occurrence of articular syndrome in patients with type 2 diabetes // Problems of biology and medicine. – 2020. – no. 1. - S. 36-39.
6. ZHURAEVA, Khafiza I., et al. "PECULIARITIES OF THE COURSE OF JOINT SYNDROME IN PERSONS WITH TYPE 2 DIABETES MELLITUS." *Journal of Natural Remedies* 22.1 (1) (2021): 92-98.