

ISSN (E): 2938-3765

MODERN IMMUNODIAGNOSIS OF DISEASES

Umarova T. A.

Assistant of the Department of Clinical Laboratory Diagnosis With the Course of Clinical Laboratory Diagnostics of PGD

Kudratova Z. E.

PhD, Ass.Professor of the Department of Clinical Laboratory Diagnosis with the Course of Clinical Laboratory Diagnostics of PGD

Narzullayeva D.

Cadet of the Department of Clinical Laboratory Diagnosis with the Course of Clinical Laboratory Diagnostics of PGD; Samarkand State Medical University Samarkand, Uzbekistan

Abstract

It is commonly believed that the function of the immune system is to protect the body from pathogens, foreign and safe mechanisms that have entered the human body from the outside. However, it also protects us from within, producing large-scale tumors and helping to destroy destructive cells [4,8,9].

Keywords: Immunodiagnostics, immune system, autoimmune diseases, blood, antigens, antibodies.

Introduction

The immune system is constantly in active mode. Disruptions in its work are not always helpful, but an experienced physician pays attention to hard-to-see symptoms and prescribes an immunologic blood test. The human immune system protects itself from the consequences of disorders and ensures the working state of the body thanks to the well-adjusted work of cells of various types. Unfortunately, the immune system has its own thing going on [6,7,8].

They can be serious, sudden, intermittent with weakening of the body or more important components that cause deterioration of health and require treatment. For example, in some diseases, the immune system shows unwanted activity. For example, allergy sufferers have immune reactions to molecular compounds that are part of innocuous substances and organisms - pollen grains or essential oils of plants, food substances, fungal spores [11,12].

In patients with autoimmune diseases, the immune system acts against natural tissues, starting to "attack" them as foreign and dangerous. In immunodeficiency states, one or another part of the immune system ceases to function. Tumor structures of the blood, such as leukemia, hemoblastosis, lymphoma, and bone marrow lesions, lead to an accumulation of non-functional immune system cells, which can lead to a reduction in body size [15,16].

Volume 3, Issue 1, January 2025

Based on the results of the observation of changes in the cellular composition and in the composition of synthesized molecules of molecules, it is possible to identify the disease and promptly begin its treatment [14].

Immunologic study - a set of laboratory tests that allow you to understand what disorders in the work of the patient's immune system. It allows you to evaluate the indicators. The object for study is usually venous blood. Assessment of the state of the immune system can occur the next day at diagnosis and cause a wide range of diseases. Which means - immunologic study of blood can be prescribed by general practitioners, rheumatologists, allergists, immunologists, oncologists, gastroenterologists. If an allergic disease is suspected, a set of immunologic tests for sensitivity to allergens is included. A set of measurable indicators is determined on the basis of a detailed interview with the patient. If the patient notices that unpleasant symptoms in the body when he walks around the city in June, conduct a sensitivity study to plant pollen. If the patient suspects an autoimmune disease, such as lupus, the doctor immediately prescribes an immunologic study of antibodies to the nuclei of natural cells in the blood [11,12,13].

As with any blood test, immunologic testing requires adequate preparation. Some indicators, such as the presence of a response to allergens, can be assessed over the course of the day. This means that it is allowed to come to the laboratory and take the tests immediately after the visit to the doctor. However, to take a blood test to describe the cells of the immune system, assess its activity and a number of other indicators must be prepared in advance. The day before the blood donation, avoid physical samples. Blood is drawn on an empty stomach, so the pandemic lab comes in the morning. To avoid errors in preparation for immunologic testing, in each case, it is better to choose in advance from the doctor who ordered the test. For the immunologic study of blood samples from a vein. In complex studies, several samples can be indicated [9,10,11].

The most obvious manifestation of the state of the immune system is the total level of lymphocytes in the blood. Its increase according to the norms practically indicates inflammation. To concretize the analysis, it is necessary to evaluate the indicators of the lower categories of cells of the immune system [7,8].

Thus, with a decrease in the number of T-lymphocytes causing viral cell death (normal 210-1200 cells per ml of blood), and an increase in the number of B-lymphocytes (normal 100-480 cells per ml) producing antibodies, the doctor should suspect an autoimmune or disease-causing disease. A decrease in the blood content of immune response regulator cells - T-helper cells (normal concentration 540-1460 per ml) - is a sure sign of immunodeficiency [4,5,6].

An important diagnostic value is the indicator of immune cell activity. If more than 20% of cells, given the destruction of the pathogen and regulation of the immune response, are in an activated state, it is necessary to take urgent measures to combat the replenishment. The immunologic study can also assess the ability of the cell to British crime. If 25% of those responsible, it is a question of development in an adult immunodeficiency patient on the background of strict conditions, and in a child allows to suspect congenital defects [1,2,3].

Thus, it is almost impossible to make an accurate diagnosis based on the analysis of individual indicators. The doctor takes into account many factors. In addition, some deviations from the norms can not be considered as signs of the immune system. For example, after a heavy operation



Volume 3, Issue 1, January 2025

or a recently transferred infection from the normal indicators of the immune system, the body's active work on recovery is observed [6,7,8,9].

References

- Abduhakimov B. A. et al. BOLALAR VA O'SMIRLARDA BIRLAMCHI TUBERKULYOZNING O'ZIGA XOS KECHISH XUSUSIYATLARI VA KLINIK-LABORATORIYA USULLARI //Ta'lim innovatsiyasi va integratsiyasi. – 2024. – T. 32. – №. 3. – C. 139-143.
- 2. Бердиярова Ш. Ш. и др. КЛИНИКО-ЛАБОРАТОРНАЯ ДИАГНОСТИКА ФОЛИЕВОЙ КИСЛОТОДЕФИЦИТНОЙ АНЕМИИ //TADQIQOTLAR. UZ. 2024. Т. 49. №. 3. С. 46-53.
- Umarova T. A., Kudratova Z. E., Axmadova P. ROLE OF CONDITIONALLY PATHOGENIC MICROFLORA IN HUMAN LIFE ACTIVITIES //Web of Medicine: Journal of Medicine, Practice and Nursing. – 2024. – T. 2. – №. 11. – C. 29-32.
- Muhamadiyeva L. A., Kudratova Z. E., Sirojeddinova S. Pastki nafas yo'llari patologiyasining rivojlanishida atipik mikrofloraning roli va zamonaviy diagnostikasi //Tadqiqotlar. Uz. – 2024. – T. 37. – №. 3. – C. 135-139.
- 5. Umarova T. A., Kudratova Z. E., Norboyeva F. MODERN ASPECTS OF ETIOLOGY AND EPIDEMIOLOGY OF GIARDIAS //Web of Medicine: Journal of Medicine, Practice and Nursing. 2024. T. 2. №. 11. C. 25-28.
- 6. Isomadinova L. K., Daminov F. A. GLOMERULONEFRIT KASALLIGIDA SITOKINLAR AHAMIYATI //Journal of new century innovations. 2024. T. 49. №. 2. C. 117-120.
- Umarova T. A., Kudratova Z. E., Maxmudova H. MECHANISMS OF INFECTION BY ECHINOCOCOCOSIS //Web of Medicine: Journal of Medicine, Practice and Nursing. – 2024. – T. 2. – №. 11. – C. 18-21.
- Даминов Ф. А., Исомадинова Л. К., Рашидов А. ЭТИОПАТОГЕНГЕТИЧЕСКИЕ И КЛИНИКО-ЛАБОРАТОРНЫЕ ОСОБЕННОСТИ САЛЬМОНЕЛИОЗА //TADQIQOTLAR. UZ. – 2024. – Т. 49. – №. 3. – С. 61-67.
- Umarova T. A., Kudratova Z. E., Baxromova M. AUTOIMMUNE DISEASES: NEW SOLUTIONS IN MODERN LABORATORY DIAGNOSTICS //International Conference on Modern Science and Scientific Studies. – 2024. – C. 78-81.
- 10. Бердиярова Ш. Ш. и др. УЗЛОВОЙ ЗОБ И ЕГО КЛИНИКО-ЛАБОРАТОРНАЯ ДИАГНОСТИКА //TADQIQOTLAR. UZ. – 2024. – Т. 49. – №. 3. – С. 38-45.
- Umarova T. A., Kudratova Z. E., Muhsinovna R. M. THE MAIN PURPOSE OF LABORATORY DIAGNOSIS IN RHEUMATIC DISEASES //International Conference on Modern Science and Scientific Studies. – 2024. – C. 82-85.
- 12. Umarova T. A., Kudratova Z. E., Ruxshona X. CONTEMPORARY CONCEPTS OF CHRONIC PANCRYATITIS //International Conference on Modern Science and Scientific Studies. 2024. C. 11-15.
- Umarova T. A., Kudratova Z. E., Maxmudova D. PATHOGENESIS OF BRONCHIAL ASTHMA DEVELOPMENT AT THE PRESENT STAGE //International Conference on Modern Science and Scientific Studies. – 2024. – C. 21-24.

291 | Page



Volume 3, Issue 1, January 2025

ISSN (E): 2938-3765

- 14. Umarova T. A., Kudratova Z. E., Muminova G. INSTRUMENTAL DIAGNOSTIC STUDIES IN CHRONIC PANCREATITIS //International Conference on Modern Science and Scientific Studies. 2024. C. 16-20.
- Umarova T. A., Kudratova Z. E., Norxujayeva A. ETIOPATHOGENESIS AND MODERN LABORATORY DIAGNOSIS OF PROSTATITIS //International Conference on Modern Science and Scientific Studies. – 2024. – C. 6-10.
- Umarova T. A., Kudratova Z. E., Abduazizova Z. NEW VIEWS ON CLINICAL AND LABORATORY ASPECTS OF ROTAVIRUS INFECTION //Web of Medicine: Journal of Medicine, Practice and Nursing. – 2024. – T. 2. – №. 12. – C. 17-20.

292 | Page