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The Role of Traditional Methods and Folk Medicine in the Prevention of Acute Leukemia

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Abstract: When hematopoietic cells mutate, the first signs of the problem appear within a month. Symptoms depend on the degree of intoxication of the body, damage to internal organs and other factors. Acute leukemia is accompanied by a number of symptoms. The article discusses this disease and its treatment with folk remedies.

Keywords: Leukemia, immature leukocytes, cells, erythrocytes, platelets, traditional treatment.

Introduction: Leukemia (blood cancer, leukemia) is one of the most common malignant blood diseases. According to statistics, leukemias account for about 3% of all cancers and more than 9% of all cancers in children. About 300,000 new cases of leukemia are diagnosed worldwide each year. This disease can develop in both children and adults, and often has an aggressive course that requires immediate medical intervention.

The main part: Leukemia is a group of malignant diseases characterized by the formation of abnormal, immature white blood cells that cannot perform their main function — protecting the body from infections. These cells begin to multiply uncontrollably in the bone marrow and other organs, displace normal blood cells, disrupt their functioning and can lead to serious diseases and complications. Leukemia can develop in both childhood and adulthood, and its form can vary significantly depending on the type of affected cells.

The main part: The process of hematopoiesis and the mechanism of leukemia development

To understand how leukemia develops, it is necessary to analyze the process of hematopoiesis. Blood consists of two main components: the liquid part (plasma) and blood cells — red blood cells, platelets and leukocytes, which are formed in the bone marrow.

1. Red blood cells are cells that are responsible for transporting oxygen and carbon dioxide in the body. Due to the hemoglobin content, they give the blood a red color and allow oxygen to be delivered to the tissues.

2. Platelets are small cells involved in blood clotting and forming clots that help stop bleeding.

3. Leukocytes are white blood cells that provide protection to the body. White blood cells have different functions in the immune system: some of them fight infections, others regulate immune responses.

All these cells have a common precursor in the bone marrow, the so-called stem cell, which can differentiate into various cell types, including white blood cells. In the case of leukemia, a malfunction occurs at one of the stages of hematopoiesis. This can lead to an uncontrolled

proliferation of abnormal white blood cells that do not perform their protective functions and begin to disrupt the normal functioning of the body.

Causes of leukemia. The causes of leukemia have not been fully established. However, it is known that there are several factors that can contribute to the development of the disease.

1. Genetic predispositions — cases of leukemia in the family increase the risk of the disease.

2. Exposure — People exposed to high levels of radiation have a higher risk of developing leukemia.

3. Chemicals — Prolonged exposure to certain chemicals, such as benzene, may increase the risk.

4. Chronic blood diseases — diseases such as myelodysplastic syndromes or previous forms of cancer can contribute to the development of leukemia.

5. Infections — some viruses, such as the Epstein-Barr virus, may be associated with the development of leukemia.

Prognosis and treatment of leukemia: The prognosis of the disease depends on many factors, including the type of leukemia, the age of the patient, the stage of the disease and his response to treatment. Leukemias detected in the early stages respond to treatment much better. Therapy can include several methods:

1. Chemotherapy is the main treatment method aimed at destroying abnormal cells.

2. Targeted therapy is the use of drugs aimed at blocking specific molecules associated with the development of cancer.

3. Bone marrow transplantation — if necessary, if other treatment methods have failed.

There is also supportive therapy aimed at improving the patient's condition and preventing complications. It is important that treatment is carried out in specialized medical institutions where there are experienced oncologists and hematologists.

Leukemia is a serious disease that requires early diagnosis and comprehensive treatment. There are many types of leukemia, each of which has its own characteristics. The prognosis for a patient depends on many factors, including the type of leukemia, age, stage of the disease, and response to treatment. Modern diagnostic and therapeutic methods can significantly improve the quality of life of patients and increase the chances of a full recovery if they seek medical help in a timely manner.

The result of the study: Since acute leukemia is included in the list of the most aggressive malignant oncological diseases, treatment should begin immediately after diagnosis. The patient is placed in an oncohematology hospital in a ward with special ventilation to remove pathogenic microflora. The main treatment method is usually chemotherapy, which is accompanied by transfusion of blood components, detoxification therapy and infection prevention. The treatment regimen consists of the main stages:

- Induction of remission — exposure to chemotherapy drugs that destroy blast cells in order to achieve the maximum possible remission;
- consolidation — consolidation of achieved results;
- prevention of relapse is to exclude the return of the disease.

In certain forms of the disease, bone marrow stem cell transplantation, performed after the destruction of blasts using chemotherapy and radiation therapy, has a good effect.

The first stage of treatment takes from 4 to 6 weeks, during which time the patient receives massive therapy. At the consolidation stage, two to three courses of treatment are carried out, after which supportive measures are continued for several years, which are necessary to

eliminate relapses. Complete remission is achieved by destroying a clone of pathological cells and restoring the normal hematopoietic process.

Acute leukemias are malignant diseases of the hematopoiesis system that require immediate medical intervention. Despite the achievements of modern medicine, interest in traditional (complementary) methods remains high, especially in the field of prevention. Immunomodulatory effect. Many folk remedies increase the body's overall resistance.:

Garlic, ginger, turmeric have antioxidant and immunomodulatory effects.

Honey, propolis, royal jelly — strengthen the immune system.

Antioxidants (protecting cells from mutations):

Beetroot juice, pomegranate, blueberry, and green tea are rich in antioxidants.

They reduce the level of free radicals, potentially reducing the risk of mutations in blood cells.

Cleansing the body (detoxification):

- Decoctions of herbs (nettle, chamomile, calendula) can promote a gentle cleansing of lymph and blood.
- Fasting, fasting, and "fasting" days are popular in oriental medicine.
- Stabilization of the psycho-emotional background:
- Yoga, (rare among Uzbeks) breathing practices, meditation, prayer — stress has been proven to depress the immune system.
- Traditional medicine pays great attention to this.

Traditional systems as the basis of prevention: Ayurveda, Tibetan Medicine, Chinese Traditional Medicine:

These systems do not treat leukemia directly, but strengthen the body through the balance of "internal energy", maintain the harmony of body systems, promote preventive nutrition, moderation and a seasonal lifestyle.

The modern scientific view. Research confirms this.

- Some plants and substances do contain bioactive components (flavonoids, polyphenols) that prevent carcinogenesis.
- However, there is insufficient evidence that they prevent acute leukemia.

What not to do.Use traditional methods instead of seeing a doctor or genetic screening (if there is a family risk). Taking questionable tinctures or "cleansing" fees without supervision can be dangerous.

Conclusion

1. Acute leukemia is a malignant blood disease in which immature blast cells multiply rapidly in the bone marrow, displacing normal cells. Unlike chronic leukemia, which progresses slowly, acute leukemia develops rapidly and requires immediate treatment.

2. The chances of living for five years or more for children are significantly higher than for adults and amount to 75-80%. In adults, this figure reaches 30%, but in some clinics it exceeds 50%. Life expectancy depends on the form of the disease: in acute lymphoblastic leukemia, it is 2-3 years, and with the myeloid form, patients live, on average, about 6 years.

3. The prognosis depends on the type of leukemia, the age of the patient, the presence of genetic mutations and the response to therapy. In children with acute lymphoblastic leukemia (ALL), the remission rate reaches 85-90%, in adults – about 40-50%. Acute myeloid leukemia (AML) has a less favorable prognosis, but modern therapies significantly improve survival.

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