LEUKEMIA – TYPES, CLINICAL APPEARANCES, DIAGNOSIS AND TREATMENT

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Abstract: Leukemia is a tumor originating from hematopoietic cells that is primarily located in the bone marrow and causes leukemia as a sign of the disease. In the vernacular, it is called leukosis, and in medicine it is called leukosis. Leukemia is an oncological condition – blood cancer. The exact causes of the disease are still unknown to medicine, and there are no preventive measures. Children, women, and adults can get this disease. The disease is registered more often in industrialized cities than in rural areas; men are more affected than women. The disease occurs all over the world – both in developed and underdeveloped countries. Leukemia is one of the urgent problems of modern medicine, but it has not yet been thoroughly solved. According to international statistics, the number of deaths from leukemia has been increasing in recent years. About 1% of all causes of death are people who die from leukemia, and about 6% from malignant tumors, and 50% in children and adolescents. Leukemia is a complex disease and is included in the list of diseases that can be treated in the 21st century. If we look at Uzbekistan, 20 years ago, the methods of effective treatment of leukemia were not yet studied to that extent. Until now, treatment methods have been developed to overcome this disease. In leukemia, abnormal blood cells are produced in the bone marrow. Usually, the disease is characterized by the production of abnormal types of leukocytes, which are responsible for fighting infection. In a white blood cell disease, abnormal cells do not perform the same functions as normal leukocytes. Cancer cells grow and actively divide, interfering with the movement of other blood cells. As a result, there is a decrease in the body’s ability to fight infections, loss of control of bleeding, and difficulty in transporting oxygen. Leukemias include

a wide group of diseases that differ in their etiology. In leukemias, blood cells of poor quality can arise from immature hematopoietic cells of the bone marrow, as well as from maturing and mature blood cells. Currently, all neoplastic diseases of blood-forming tissues are called hemoblastoses. According to the nature and location of pathological processes, they are divided into two groups. According to the World Health Organization, in recent years, the number of deaths from leukemia has been increasing across countries.

Key words: white blood, bone marrow, hemosarcoma, peripheral, blast, Neurofibromatosis, Philadelphia chromosome, Noonan syndrome, telangiectasia, Aleukemic, megakaryoblast;

Leukemia is a general name for tumors that arise from blood-forming cells and damage the bone marrow. There are speculations about the viral nature of leukemia. The essence of leukemia is damage to the bone marrow, spleen, and lymph nodes. In leukemia, large numbers of immature leukocytes appear in the peripheral blood, which are usually found only in the bone marrow and lymph nodes. In some cases, the total number of leukocytes in the peripheral blood does not increase, they only change in quality. Such leukemias are called aleukemic leukemias. The exact cause of leukemia is unknown, but it involves a combination of genetic and environmental factors. Leukemia cells develop mutations in their DNA that cause them to grow abnormally and lose the function of normal white blood cells. It is not known what caused this mutation. One type of cellular DNA mutation that is common in leukemia is called a chromosomal translocation. In this process, part of one chromosome is broken and added to other chromosomes. One translocation seen in nearly all cases of chronic myelogenous leukemia, and sometimes in other types of white blood cell disease, is a DNA exchange between chromosomes 9 and 22. This process leads to what is called a Philadelphia chromosome. This creates an oncogene (a cancer-promoting gene) called BCR-ABL. This change in DNA is not passed from generation to generation, but it has an impact on a person's life.

Treatment. In the early stage of the disease, active treatment is carried out, such as chronic myelogenous leukemia. The main focus is on organizing work and rest, taking enough walks in the open air, following a complete diet with a large amount of vitamins and proteins.

1. In order to reduce the growth process of tumors, chemotherapy and cytostatic treatment are carried out.
2. Hormonal drugs are used to treat autoimmune hemolytic anemia, splenectomy is recommended.
3. Antibiotics are given to treat infectious complications of the disease.
4. Retabolil, vitamins, u-globulin to increase the body's defenses.

Chemotherapy is used during the disease outbreak. Chlorbutin (leucaran) 10-15 mg per day for 4-6 weeks, cyclophosphan 200-600 mg per day or intramuscularly for 4-6 weeks, degranol 50-75 mg intravenously 5-10 times per day. Hormonal hemolytic anemia and thrombocytopenia will be assigned when it appears. In the terminal stages of the disease, when it is severe, polychem ion therapy is carried out. Enlarged lymph nodes, spleen are treated with radiation. Leukophoresis can be performed several times.

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