

Basic Perspectives of Leukemia and Dietary Intake

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Description

Leukemia is a blood cancer that usually begins in the bone marrow and ends with a large number of irregular blood cells. These blood cells, also called blasts or leukemia cells, have not yet fully formed. The blood in your body seems simple and easy. It is a red liquid that travels in your veins and carries oxygen and other nutrients to the tissues of your body. But in reality, blood can be a complex fluid, so the number of cancers that affect blood reflects its complexity [1]. "Leukemia belongs to a large group of blood cancers" (which also includes lymphoma and myeloma). "With leukemia, we usually have some kind of defect in the very early cells - myeloid cells and lymphocytes," The bone marrow is the soft part of the bones where new hematopoietic stem cells are made. In people without leukemia, these stem cells slowly mature into red blood cells, white blood cells, and platelets that we are all familiar with, and then circulate throughout the body like the blood you see when you donate blood or cut yourself. But for leukemia patients, cancer cells can affect the hematopoietic stem cells in the bone marrow. Once cancerous, these cells will not mature or die like healthy blood cells. Cancer cells do not work like healthy blood cells, depriving people of healthy blood functions [2]. Like all cancer cells, they grow and divide rapidly; squeezing healthy cells out of the bone marrow, and can spread to other parts of the body. Reflecting the complexity of blood, it will divide leukemia into several subtypes based on the speed of progression (acute or chronic) and the type of blood cells affected. There are four main types of leukemia and several other subtypes in each category. The main types are acute and chronic leukemia and acute and chronic myeloid leukemia [1].

Generally speaking, acute disease progresses faster and chronic disease progresses slowly. Chronic and acute myeloid lymphocytes are the most common types, while acute lymphocytes are the most common in children. The definition of leukemia is not very different from the meaning of leukemia. In order to explain in detail the meaning of leukemia, it is a cancer that originates in hematopoietic tissues, the most common being bone marrow. It can cause dysfunctional white blood cells, which are part of the immune system's defence against infections. Cancer of the tissues that make up the blood hinders the body's ability to fight infection. Leukemia is a cancer of blood-forming tissues, including bone marrow [3]. There are many types, such as acute lymphocytic leukemia, acute myeloid leukemia and chronic lymphocytic leukemia. Many patients with

slow-growing leukemia have no symptoms. The fast-growing type of leukemia can cause symptoms that include fatigue, weight loss, frequent infections, and direct bleeding or bruising. Treatment methods are very diverse. For slow-growing leukaemia's, treatment may include follow-up. For aggressive leukemia, treatment includes chemotherapy, sometimes followed by radiation therapy and stem cell transplantation. Leukemia can be a cancerous disease of the white blood cells, which can fight infection. Like other types of blood cells in the body (red blood cells that carry oxygen and platelets that help control bleeding), white blood cells form in the bone marrow, which is a spongy substance that fills the bones [1]. In the bone marrow, immature cells proliferate and mature into red blood cells, white blood cells, and platelets. When they mature, they are released into the blood. In leukemia, the white blood cells do not grow or develop normally, but they are out of control and immature. This uncontrolled growth of immature white blood cells can block the bone marrow, preventing it from making healthy white blood cells, red blood cells, and platelets [4].

Classification of leukemia

Leukemia is divided into several categories based on clinical and pathologic features. The first difference is the type of acute and chronic disease.

1. Acute leukemia

Acute leukemia refers to an increase in the number of immature blood cells in a short period of time. Due to the crowding of these cells, the bone marrow cannot obtain healthy blood cells, resulting in low levels of haemoglobin and platelets. Due to the rapid development and accumulation of malignant cells, which then spill into the blood and spread to other organs of the body, leukemia requires immediate attention. The most common type of leukemia in children is leukemia.

2. Chronic leukemia

Chronic leukemia refers to the irregular accumulation of relatively mature but still abnormal white blood cells. The cell formation rate is higher than average, resulting in many irregular white blood cells, which may take months or years to progress. Unlike leukemia, which must be treated directly, leukemia is generally monitored for a period of time before treatment to ensure that the drug treatment is as successful as possible. Chronic leukemia is more common in the elderly, but it can affect people of any age.

3. Lymphocytic leukemia

Lymphocytic or lymphocytic leukemia carcinogenesis occurs in a type of cell in the bone marrow, sometimes forming lymphocytes, which is a cellular system that fights infection. Most lymphocytic leukaemias involve a special subtype of lymphocytes, the B lymphocytes.

4. Myeloid leukemia

Myeloid or myeloid leukemia cancer occurs in one type of cell in the bone marrow, sometimes forming red blood cells, various other types of white blood cells and platelets.

5. Pre-leukemia Meaning

The irregular proliferation of non-cancerous megakaryocytes is similar to itself, which can lead to a transient myeloproliferative disease, also known as transient leukemia. This disease is only seen in people with Mongolian or almost similar genetic abnormalities occur during pregnancy.

Intake of food during cancer treatment

When dealing with leukemia, nutrition is usually an important part of your journey. Leukemia is any of several bone marrow cancers that destroy the production of blood cells, including white and red blood cells and platelets. Maintain a healthy weight. A strict diet is not recommended during cancer treatment. Losing weight reduces your energy status and reduces your body's ability to fight infection. Eat smaller meals throughout the day [5]. Eating small, frequent meals ensures that your body gets enough calories, protein, and nutrients to withstand the treatment. Eating less can also help reduce treatment-related side effects, such as nausea. Try to eat small meals or "mini" meals approximately every three hours. Choose foods rich in protein. Protein helps the body repair cells and tissues. It can also help your immune system recover from illness. Add a lean protein source to all meals and snacks. Good sources of lean protein include: Lean meats such as chicken, fish, or turkey; Eggs, Probiotics provide healthy bacteria to your stomach and help your body improve its ability to process food: Low-fat dairy products such as milk, yogurt, and cheese or milk substitutes; Nuts and nut butters, Legumes and Soy foods. Includes whole grains. Whole grains provide a good source of carbohydrates and fibre and help maintain energy levels. Good sources of whole grains include: oats, whole wheat bread, brown rice, whole wheat pasta. Whole grains are rich in nutrients. They are also a multifunctional ingredient and can be added to various dishes or eaten alone. Brown rice, oats, Bulgaria, and buckwheat are all goodies which will be added to

your leukemia diet. Fruits and Vegetables provide the body with antioxidants that can help fight cancer; a leukemia diet should include plenty of fruits and vegetables [6].

Choose a variety of colourful fruits and vegetables to get the best benefit. Try to erode least 5 servings of fruits and vegetables a day. Add fruit to whole-grain cereals to make a smoothie of the day, or enjoy a bowl of berries as a dessert. Choose a healthy source of fat. Avoid fried, greasy and greasy foods. Instead, choose foods that are baked, grilled, or grilled. Healthy fats include: olive oil, avocado, nuts, seeds. Limit sweets and added sugar. Foods high in added sugars, such as desserts and sweets, have little nutritional value and sometimes replace other foods that are more beneficial to you. Stay hydrated; drinking enough fluids during cancer treatment is important to stop dehydration. The goal is to drink 64 ounces of fluid every day. Avoid drinking large amounts of caffeinated beverages. Too much caffeine can cause dehydration. Those who are struggling with disease, staying hydrated are important for many reasons. Regulate blood heat, keep joints lubricated, and keep organs working normally. It also prevents infection and provides nutrients to normal blood cells. It can also improve your sleep quality and mood. Practice good food safety. Wash your hands often when preparing food. Use different knives and cutting boards to cut raw meat and vegetables. Make sure to cook all food to the proper temperature and refrigerate leftovers directly.

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