Types of Acute and Chronic Leukemia

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The Different Types of Leukemia and Their Symptoms

Many cancers cause tumors to develop. Leukemia differs because it is a blood cancer and it causes a sharp rise in the white blood cells, which makes it difficult for the red blood cells and platelets to function. Because there are so many white blood cells, there is not enough room for the red blood cells and platelets. In addition, the white blood cells do not function correctly. There are many types of leukemia.

White blood cells assist with fighting infection. When the body produces abnormal white blood cells, they are unable to fight infection in the correct way. This may mean that the body is unable to appropriately fight infection.

The Different Types of Leukemia

There are various types of leukemia. Leukemia is typically classified as being either acute or chronic, and lymphocytic or myelogenous. Acute leukemia involves immature blood cells, chronic leukemia involves mature blood cells, lymphocytic leukemia affects the lymphoid cells, and myelogenous leukemia affects the myeloid cells.

The Most Common Types of Acute Leukemia

As previously noted, acute leukemia involves immature blood cells. Acute leukemias involve cells that multiple rapidly, thus the cancer progresses quickly. For this reason, treatment must be timely and aggressive.

The most common types of acute leukemia are:

- **Acute lymphocytic leukemia (ALL).** This is the most common in children, though it can also occur in adults.
- **Acute myelogenous leukemia (AML).** This is common in both children and adults.

There are other rare types of leukemia such as hairy cell leukemia, myelodysplastic syndromes and myeloproliferative disorders.

What Are the Causes of Acute Leukemia?

There is no known cause of acute leukemias. Researchers have been able to pinpoint various risk factors that seem to increase the likelihood of developing acute leukemias. These risk factors include:

- **Smoking.** People who smoke are more likely to develop AML than those who do not smoke.
- **Chemical exposure.** Certain chemicals are known to increase the risk of development of acute leukemias. For example, exposure to high levels of benzene increases the likelihood of developing AML.
- **Chemotherapy.** Those who have undergone chemotherapy for other cancers have a higher likelihood of developing AML. Having undergone radiation in addition to chemotherapy further increases the likelihood

of developing AML.
- **Congenital conditions.** Having certain congenital conditions, such as Down syndrome, Bloom syndrome, Neurofibromatosis I, and Kostmann Syndrome, all increase the likelihood of developing AML.
- **Radiation.** Being exposed to radiation is a known risk factor for development for ALL. For example, radiation exposure in utero increases the likelihood.
- **Viral infections.** Though rare in the U.S., certain viral infections increase the likelihood of developing ALL. These include HTLV-1 and Epstein-Barr virus.
- **Inherited syndromes.** Having inherited syndromes, such as Klinefelter syndrome, Fanconi anemia, and Ataxia-telangiectasia, increases the likelihood of developing ALL.

What Are the Symptoms of Acute Leukemia?

Common symptoms of those who suffer from acute leukemia include the following:

- Excessive sweating, especially at night
- Frequent infections
- Fatigue that does not improve with rest
- Fever or chills
- Unintentional weight loss
- Bleeding easily
- Bruising easily
- Bone pain or tenderness
- Swollen lymph nodes that are painless
- Red spots on the skin called petechiae
- Enlargement of the liver or spleen

Symptoms are typically extreme for those who suffer acute leukemias.

Most Common Types of Chronic Leukemia

As previously noted, chronic leukemia involves mature blood cells. With chronic leukemia, the cells progress slowly, and symptoms are typically much milder than those who suffer from acute leukemias.

The most common types of chronic leukemia are:

- **Chronic lymphocytic leukemia (CLL).** This is the most common type of chronic adult leukemia. Adults with CLL may feel well for years before requiring treatment.
- **Chronic myelogenous leukemia (CML).** This type is rare in children. This type exhibits no symptoms for months or years. Once symptoms develop, the cells begin to multiply quickly.

There are other rare types of leukemia such as hairy cell leukemia, myelodysplastic syndromes and myeloproliferative disorders.

What Are the Causes of Chronic Leukemia?

There is no known cause of chronic leukemias. Researchers have been able to pinpoint various risk factors that seem to increase the likelihood of developing chronic leukemias. These risk factors include:

- **Family history.** Having a close relative with CLL or another lymphatic-type cancer increases the likelihood of developing CLL. According to Cancer.net, if a first-degree relative, such as a parent, sibling, or child has CLL, the chances of developing CLL, you are two to four times more likely to develop it.
- **Age.** People are more likely to develop chronic leukemias if they are over the age of 50. In fact, the average age is 71.
- **Race and ethnicity.** Chronic leukemias are more likely to develop in those who are of Russian and European descent; they are extremely rare in those from Asian descent.

- **Agent Orange exposure.** Having been exposed to Agent Orange in the Vietnam War increases the likelihood of chronic leukemias.
- **Monoclonal B-cell lymphocytosis.** This condition is when there are higher than normal lymphocytes and may be a precursor to chronic leukemias.

What Are the Symptoms of Chronic Leukemia?

Common symptoms of those who suffer from chronic leukemia include the following:

- Excessive sweating, especially at night
- Frequent infections
- Fatigue that does not improve with rest
- Fever or chills
- Unintentional weight loss
- Bleeding easily
- Bruising easily
- Bone pain or tenderness
- Swollen lymph nodes that are painless
- Red spots on the skin called petechiae
- Enlargement of the liver or spleen

Those who suffer from chronic leukemias may not suffer from symptoms initially for months or even years. Depending on the type of chronic leukemia, symptoms may be mild or may be severe, once symptoms are experienced.

When to Seek a Doctor

If you have experienced any of the above symptoms and believe you are at risk, make sure to talk to your doctor so you can get a proper diagnosis and treatment plan.