

Chronic Lymphocytic Leukaemia

What is Chronic Lymphocytic Leukaemia?

Chronic Lymphocytic Leukaemia (CLL) is the most common type of leukaemia to affect adults, accounting for approximately 25-30% of all leukaemias. Incidence of CLL in Western countries is around 2-4 per 100,000 and is twice as common in men as in women.

CLL is perceived as an indolent disease – meaning that it is slow to progress - and mainly affects the elderly with 95% of patients diagnosed after the age of 55 and the median age for diagnosis believed to be approximately 70 years of age.

The causes

The cause(s) of CLL are largely unknown. However, research has focused on some factors that may contribute to the development of malignancies, including genetic factors, impaired immune system and viruses. Scientists have established that CLL occurs in males more often than females and in white populations more often than Asian populations, however the precise cause for this cannot be explained.

The symptoms

CLL is a dormant disease and is often diagnosed coincidentally. For this reason approximately 50% of patients with CLL are asymptomatic at the time of diagnosis – meaning that they display no symptoms of the disease.

For those patients displaying symptoms, these can be as follows:

- Enlarged painless nodes in the neck, armpits, abdomen and groin
- Recurrent infections, which are related to the poorly functioning immune system
- Weight loss
- Fevers
- Night sweats

- Excessive fatigue
- Sensations of fullness in the abdomen (usually due to an enlarged spleen)

As a number of patients with CLL do not experience any symptoms, or mistake some of the symptoms with other everyday ailments, the diagnosis of CLL is often incidental. This means that patients will feel fit and well but a routine blood test performed as part of a regular health check will reveal that they have the disease.

The treatment

Treatments are usually aimed at controlling the disease by managing symptoms (palliative) rather than curing the disease (curative). Over time, treatments lose their efficacy. For this reason, it is generally agreed that treatment should not begin until it is necessary to control the symptoms of the disease.

Different types of treatment are available for patients with CLL. These include:

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| Chemotherapy | <ul style="list-style-type: none"> • Uses drugs to stop the growth of cancer cells, either by killing the cells or by stopping the cells from dividing |
| Surgery | <ul style="list-style-type: none"> • Splenectomy is surgery to remove the spleen |
| Monoclonal antibody therapy | <ul style="list-style-type: none"> • Uses antibodies made in the laboratory from a single type of immune system cell. These antibodies can identify substances on cancer cells or normal cells substances in the body that may help cancer cells grow. The antibodies attach to the substances and kill the cancer cells, block their growth or keep them from spreading |
| Chemotherapy with stem cell transplant | <ul style="list-style-type: none"> • New type of treatment being tested in clinical trials • Method of giving High dose chemotherapy and followed by the infusion of bone-marrow cells capable of replacing the ing blood-forming cells that have been destroyed by the cancer treatment chemotherapy. Stem cells are removed obtained from the blood or bone marrow of the patient or a donor and are can be frozen and stored. After the chemotherapy is completed, the stored stem cells are thawed and given back to the patient through an infusion. These re-infused stem cells grow into (and restore) the body's blood cells |