Lymphoma

Summary

- Lymphoma is a group of cancers that affect the lymphatic system.
- Symptoms of lymphoma may include swelling of the lymph nodes, weight loss and night sweats.
- Lymphomas are one of the more common types of cancer in Victoria.

Lymphoma is a cancer that begins in the lymphatic system. There are two main types of lymphoma – non-Hodgkin lymphoma (NHL) and Hodgkin lymphoma (sometimes called Hodgkin disease).

The cells of Hodgkin lymphoma look a particular way under a microscope. Lymphoma cells that do not look like this are a non-Hodgkin lymphoma. It is important for doctors to be able to tell the difference between Hodgkin and non-Hodgkin cells, because they are two different diseases. They are quite similar in many ways, but the treatment for each is different.

Non-Hodgkin lymphoma is one of the most common cancers in Victoria, affecting about 1,155 people a year. It can occur in children, but is more common in adults. Hodgkin lymphoma is much less common. About 165 Victorians are affected each year.

The lymphatic system and lymphoma

The lymphatic system is part of the immune system, which helps protect our body against infection. It consists of lymph nodes connected by lymph vessels, which branch out into all parts of the body, except the brain and spinal cord.

The lymphatic system also includes the bone marrow, spleen, thymus gland and tonsils. Its main jobs are to:

- drain fluids back into the bloodstream from body tissues
- filter the blood and lymph
- fight infection.

The lymphatic system carries a clear fluid called lymph, which contains many white blood cells called lymphocytes. The lymphocytes mature within the blood and bone marrow, and are stored in the lymph nodes. Lymph nodes are found in various areas of the body, including the neck, armpits, chest, abdomen and groin. Lymph fluid is filtered through the lymph nodes, and any foreign organisms (such as bacteria) are trapped and attacked by the lymphocytes.

In a person with lymphoma, large numbers of abnormal lymphocytes are made, which replace some of the normal lymphocytes. This can affect the immune system and the way the body fights infections. The lymph nodes also become swollen, forming painless lumps.

The lymphatic system runs through most of the body. This means you can get lymphoma almost anywhere. It is most commonly first seen in the lymph nodes in the neck, but it is also fairly common to find it in the liver or spleen. You may also find lymphoma in the bowel, stomach, brain, skin, testicles and eyes.

Symptoms of lymphoma

The most common symptom of lymphoma is a swelling of the lymph nodes in the neck, armpit or groin. These swellings are usually painless.

Other general symptoms include:

- unexplained weight loss (more than one-tenth of your total weight)
• fever that comes and goes without any obvious cause
• heavy sweating, especially at night
• some people have unexplained itching.

Doctors call this group of symptoms ‘B symptoms’. Some people with lymphoma may have them, but many don’t. Sometimes, lymphoma gets into the bone marrow, causing problems with low blood counts.

Most people who have any of these symptoms will not have lymphoma. They will be suffering from a much less serious problem such as a throat infection. However, it is always important to see your doctor if you have symptoms.

**Causes of lymphoma**

We don’t know why most people get lymphoma. There are many different types of lymphoma and it is unlikely that there is one single cause of all lymphoma.

There are some known risk factors, which include:

• exposure to radiation
• exposure to certain chemicals
• infections and viruses, including the human immunodeficiency virus (HIV) and the Epstein-Barr virus in people whose immune system is suppressed.

Other risk factors are still being researched.

**Diagnosis of lymphoma**

Most people begin by going to see their doctor with symptoms. If your doctor has concerns that you may have lymphoma, they will refer you to a hospital to have a biopsy. This means having one of the swollen lymph nodes taken out and examined under a microscope to see if it contains cancer cells.

If the lymph node biopsy contains cancer cells, the pathologists will also be able to diagnose the specific type of lymphoma. You will need to have further tests to see where and how far the lymphoma has spread.

These tests may include:

• physical examination and blood tests
• chest x-rays
• computed tomography (CT) scan – a specialised x-ray for building up three-dimensional pictures of the body
• gallium scan – a short-lived, radioactive form of gallium is injected into the body, and outlines organs in the body when viewed with a special ‘gamma’ camera
• positron emission tomography (PET) scan – a small amount of radioactive material is injected, which highlights cancerous areas when viewed with a special scanner
• bone marrow biopsy – some bone marrow is removed from the hip bone and examined for cancer cells.

Test results can take a few days to come back. It is very natural to feel anxious while waiting to get your results. It can help to talk to a close friend or relative about how you are feeling. You can also contact the Cancer Information and Support Service on 13 11 20 and speak with an experienced cancer nurse.

**Stages of lymphoma**

The disease is ‘staged’ according to its location and spread. This is important to determine the type of treatment you will need. The stages are:

• Stage I – cancer is found in one lymph node area or one area or organ outside the lymph nodes.
• Stage II – cancer is found in two or more lymph node areas or in one area or organ outside the lymph nodes on the same side of the diaphragm (the sheet of muscle slung beneath the lungs that enables breathing).
• Stage III – cancer is found in lymph node areas on both sides of the diaphragm.
• Stage IV – cancer has spread outside the lymphatic system to one or more organs, such as the spleen, liver or skin.
Treatment for lymphoma

Treatment for lymphoma depends on the location and severity of the cancer. Treatment for Hodgkin lymphoma is often very successful, with many people being cured. Non-Hodgkin lymphoma is also curable, but it can be harder to treat.

Treatments are slightly different for Hodgkin’s lymphoma and non-Hodgkin’s lymphoma. Some people only need one treatment. Others will need a combination.

Options include:

- **Watchful waiting** – some forms of slow-growing non-Hodgkin’s lymphoma may not need active treatment when first diagnosed. Regular check-ups will be necessary.
- **Chemotherapy** – either tablets or injections of anti-cancer medication are used.
- **Radiotherapy** – x-rays are used to target and kill cancer cells. This is used in adults, but rarely used to treat children with lymphoma.
- **Steroids** – tablets or injections can improve how well your chemotherapy works.
- **Immunotherapy (biological therapy, monoclonal antibodies)** with antibodies – this involves treatment that uses natural body substances or medication made from natural body substances. One treatment available in Australia to treat NHL is called rituximab (MabThera®). It is usually combined with chemotherapy. Several more antibody treatments are in clinical trials and more are being developed.
- **Stem cell (or bone marrow) transplantation** – stem cells are the cells that blood cells evolve from. High doses of chemotherapy can damage stem cells so, during this treatment, stem cells are removed from the bone marrow before higher doses of chemotherapy are given. They are then transplanted back after the chemotherapy has finished. This is called an autologous stem cell transplant. This treatment may be suggested if the disease comes back or does not respond to the first treatment.
- Sometimes, it is necessary to have stem cells from a relative or a donor who is not related to you, but who has matching bone marrow. This type of transplant is sometimes done if your lymphoma comes back after a transplant using your own stem cells, and is called an allogeneic stem cell transplant. Allogeneic transplants have more side effects and complications, and this treatment is not suitable for everyone.
- **Complementary and alternative therapies** – when used alongside your conventional cancer treatment, some of these therapies can make you feel better and improve your quality of life. Others may not be so helpful and in some cases may be harmful. The Cancer Council Victoria booklet called Understanding complementary therapies can be a useful resource.

All treatments have side effects. These will vary depending on the type of treatment you are having. Many side effects are temporary, but some may be permanent. Your doctor will explain all the possible side effects before your treatment begins.

**Your sexuality and lymphoma**

Having lymphoma and its treatment can affect the way you feel about your body, who you are, your relationships, the way you express yourself sexually and your sexual feelings (your ‘sexuality’). These changes can be very upsetting.

Your medical team should discuss these issues with you before and during your treatment. If you feel you would like to discuss things further, ask your doctor for a referral to a counsellor or call the Cancer Information and Support Service on 13 11 20.

If you have a partner, it helps to be as open as possible with them about how you are feeling. The Cancer Council Victoria booklet called Sexuality, intimacy and cancer may also be helpful to read.

**Research into lymphoma**

Early detection and better treatment have improved survival for people with lymphoma. Research for lymphoma is ongoing. The Cancer Research UK website has information about research into Hodgkin lymphoma and non-Hodgkin lymphoma.

**Caring for someone with cancer**

betterhealth.vic.gov.au
Caring for someone with cancer can be a difficult and emotional time. If you or someone you know is caring for someone with lymphoma, there is support available. The Cancer Council Victoria booklet called *Caring for someone with cancer* may also be helpful to read.

**When a cure isn’t possible**

If lymphoma has been diagnosed in its later stages, the cancer may have spread to the point where a cure is no longer possible. Treatment then focuses on improving quality of life by relieving the symptoms (this is called ‘palliative’ treatment). Medications can be used to relieve pain, nausea and vomiting. The Cancer Council Victoria booklet called *Living with advanced cancer* may be helpful to read.

**Where to get help**

- Your **GP (doctor)**
- **Cancer Council Victoria, Information and Support Service** Tel. 13 11 20
- **Multilingual Cancer Information Line**, Victoria Tel. 13 14 50
- **WeCan website** helps people affected by cancer find the information, resources and support services they may need following a diagnosis of cancer.
- **Leukaemia Foundation** Tel. 1800 620 420 or (03) 9949 5800

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