



Hong Kong Cancer Fund was established in 1987 to provide support, information and care to those living with cancer and to increase awareness and knowledge of cancer in the community.

Our CancerLink support centres offer professional support and connect 22 cancer peer groups to form an extensive service network for those with cancer and their families, providing emotional support and practical assistance.

This publication is one in a series of information booklets that discuss different aspects of cancer, including possible treatment, side effects and emotional issues. They are intended to inform you about available treatments and care. A soft copy of the booklet is also available on our website for free download.

The free services offered by Hong Kong Cancer Fund are made possible only through donations from the public. If you would like to show your support and concern for cancer clients, please contact us. Your generosity will directly benefit those touched by cancer in Hong Kong.

Service hotline: 3656 0800 Website: www.cancer-fund.org Donation hotline: 3667 6333

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Introduction

Many people feel shocked when told they have cancer. We hope this booklet will answer some of the questions you may have about lymphoma, cancer of the lymphatic system.

All care is taken to ensure that the information contained is accurate at the time of publication. However, an introductory booklet like this is no substitute for professional advice. Before commencing any medical treatment, always consult your doctor.

You are welcome to pass this booklet to those close to you. They, too, may want to be informed so that they can help. You are welcome to download related booklets in our cancer series: www.cancer-fund.org/booklet/en.



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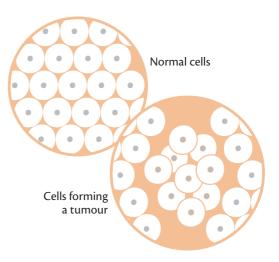
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What is cancer?

Cancer is a disease of our cells, which are the body's building blocks. Our cells divide constantly to enable us to grow, to replace worn-out cells, and to heal damaged cells after an injury.

Cells normally divide in an orderly way, guided by their genes. But, occasionally, genes can be damaged due to our living environment or hereditary problems in the family, causing cells to divide and multiply uncontrollably, forming a lump called a tumour.

Not all tumours are cancerous. Benign (non-cancerous) tumours do not spread outside their normal boundary. While some benign tumours are pre-cancerous and must be treated before they turn malignant, most stop growing at a certain point and pose no discernible problem. You can, of course, have it removed by surgery or other means. But in general, unless it becomes too big and presses on tissues and organs



or impedes the function of your body, it may be advisable to leave it and have regular check-ups to monitor it.

Malignant (cancerous) tumours are ones in which the cells multiply excessively and uncontrollably and form a lump. They can also migrate to other parts of the body (a secondary cancer site or metastasis) and start to drain our energy. If not treated in time, we can be consumed by them.

Cancer spreads via the body's fluid channels

There are two crisscrossing 'canal' systems in our body: blood vessels compose the blood and circulating systems, and lymph vessels compose the lymphatic system. If cancer cells enter nearby blood vessels or lymph vessels, they can reach other tissues and organs and settle there, forming secondary cancer sites. A cancer that has spread not only causes more harm to the body but is more difficult to treat than one sitting in just the original location.

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Cancer Risks

Cancer is a complicated disease. Currently, there is no known single cause of cancer. However, studies show that cancer is related to a variety of risk factors including internal factors like DNA, environmental factors like air and water pollution, and personal lifestyle choices.

Cancer risk factors refer to the criteria that may increase a person's chance of having cancer. Statistics show that there are factors that appear more frequently in cancer patients than healthy people, and thus these factors are used to estimate one's risk of cancer.

Although risk factors are related to a person's chance of having cancer, it does not mean that having these risk factors will directly lead to cancer. Even if you have several cancer risk factors, it does not mean you will get cancer. Meanwhile, certain cancer patients may not have any risk factors relating to the cancer at all. Bear in mind also that a risk factor becomes valid only when it is accumulated for a long time. Occasional exposure to a risk factor will not increase your chance of getting cancer by a great deal.

Knowing more about cancer risk factors can help us adjust our lifestyles to reduce the chance of getting cancer. The following are four major risk factors:

1. Age

Cancer is found mostly in middle-aged people and the elderly. Although we cannot avoid aging, maintaining a healthy lifestyle when we are young can reduce the chance of having cancer when we get old.

2. Lifestyle

Habits like excessive alcohol consumption, over eating or drinking, mental stress, and lack of exercise may not directly cause cancer. However, it will lower your body's immunity which increases the chance of getting cancer in the long run.

3. Living environment

Air, water or food pollution may increase your chance of getting cancer. If there is bright sunshine where you live throughout the year, this will also increase radiation exposure, which increases the chance of cancer.

4. Inheritance

Abnormal activity in DNA cells may increase your chance of getting cancer. Some cancer causing DNA may even be passed on to the next generation. Although not all of us will inherit the damaged DNA from our parents, and not all of us will get the disease in our lifetime, people with a family history of cancer should undergo screenings regularly for early detection.

Today, scientists are working hard to discover the causes of cancer, but for the time being, risk factors are still being used as the criteria to maintain a healthy life.

Lymphatic system

As part of the body's immune system, the lymphatic system is a network of fluid channels that runs all over the body, carrying white blood cells (lymphocytes) to fight infection. It consists of:

Lymph: Colourless, watery fluid that flows in the lymphatic system, carrying white blood cells to fight infection

Lymph vessels: A network of thin tubes that collect lymph fluid from different parts of the body and return it to the bloodstream.

Lymph nodes: Small, bean-shaped structures that filter lymph fluid and store white blood cells. Located along the network of lymph vessels and found throughout the body. Clusters of lymph nodes are found in the underarms, pelvis, neck, abdomen, and groin.

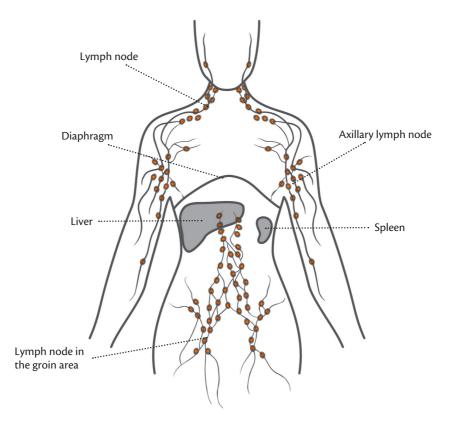
Spleen: An organ on the left side of the abdomen near the stomach that makes white blood cells, filters the blood, stores blood cells, and destroys old blood cells.

Thymus: An organ in the chest behind the breastbone in which white blood cells grow and multiply.

Tonsils: Two small masses of lymph tissue at the back of the throat that make lymphocytes.

Bone marrow: The soft, spongy tissue in the central cavity of large bones which makes white blood cells, red blood cells as well as platelets (cells which help to stop bleeding).

Since lymphatic tissues are found throughout the body, cancer of the lymphatic system (lymphoma) can begin in almost any part of the body or spread to the liver and various organs/tissues linked to the lymphatic system.



Lymphoma

Lymphoma is a cancer of the lymphatic system. An obvious symptom is uncontrolled proliferation of cancerous lymphatic cells (lymphocytes) resulting in the enlargement of lymph nodes.

Lymphoma differs from most types of cancer in its initial site and mobility. Since the lymphatic network covers the whole body, lymphoma can start in almost any part of the body, unlike most cancers which start in a particular organ or type of tissue. Organs and tissues linked to the lymphatic system, such as the liver, are also easily affected by lymphoma.

Because lymph nodes, in which lymphocytes reside, are inter-connected by the lymphatic network. Lymphoma cells can spread to distal sites in the lymphatic system.

Sometimes, lymphoma may arise outside of lymph nodes, e.g. in the stomach, small bowel, skin, tonsils, thyroid or testicles. They may even spread via the bloodstream to the spleen, bone marrow, liver, lungs, or brain.

There are two main types of lymphoma: the less common type Hodgkin (also called Hodgkin disease) and the more common type non-Hodgkin (NHL for short). They both have similar symptoms. The best way to differentiate them is to examine body tissue under a microscope for signs of a special kind of cancer cell called Reed-Sternberg, which is present only in Hodgkin.

Their other big difference is occurrence. In Hong Kong, as in most parts of the world, non-Hodgkin (NHL) cases are many times more common than Hodgkins. NHL is actually among the top 10 most lethal cancers in Hong Kong and in 2015*, the latest year with official figures available, there were 976 new cases and 358 deaths. Amongst NHLs, B-cell type is far more common than T-cell type.

*Source: 2015 figures published by Hong Kong Cancer Registry, Hospital Authority, in 2017

The symptoms shared by non-Hodgkin and Hodgkin can be grouped into four categories:

Lymph nodes enlargement: Painless swelling of the neck, armpit or groin, usually the first symptom.

General symptoms: Night sweats; fever; weight loss; fatigue; or persistent itching all over the body in case of Hodgkin's lymphoma

Site dependent symptoms: Since lymphoma can start almost anywhere, body parts close to the lymphoma site will be affected and cause symptoms. For example, a cough, difficulty in swallowing or breathlessness (if lymphoma is in the chest area); or indigestion, tummy pain or weight loss (if lymphoma is in the stomach or bowel).

Blood cell deficiency symptoms: When your number of blood cells are reduced by lymphoma spreading to the bone marrow, which is where blood cells are made, this can cause: fatigue (not enough red blood cells); vulnerability to infections (not enough white blood cells); bruising or bleeding (not enough blood-clotting cells or platelets).

Since the diagnosis and treatment of Hodgkin and non-Hodgkin are in general similar, this booklet will concentrate on the more common non-Hodgkin, leaving the last chapter to Hodgkin. If your concern is about Hodgkin, remember that most of the information on non-Hodgkin also applies to Hodgkin.

Causes of Non-Hodgkin lymphoma (NHL)

While most NHL patients have no risk factors, the following factors may increase your risk of getting NHL. Having one or more of the risk factors listed below does not mean that you will get NHL, and not having any does not mean that you are immune from it.

General condition: Being older, male.

Weakened immune system: E.g. infected with HIV or taking immune suppressing medicine after an organ transplant.

Autoimmune disease: E.g. rheumatoid arthritis or some type of thyroiditis.

Inherited immune disorder

Infection: A stomach infection called helicobacter pylori may cause lymphoma to develop in the stomach. Infection with the Epstein Barr virus (EBV), which causes glandular fever, is also considered a risk.

As with other cancers, NHL isn't infectious and can't be passed on to other people.

Symptoms of Non-Hodgkin lymphoma (NHL)

The most common early symptom of lymphoma is painless swelling in lymph nodes near the neck, armpit, groin, or stomach. Other more general symptoms include:

- heavy, drenching sweats at night
- unexplained fever that comes and goes
- unexplained weight loss
- tiredness
- lingering itching of the skin (more often in Hodgkin).

If lymphoma has spread to or is compressing on a major organ, you may:

- cough, have difficulty in swallowing or feel breathlessness if lymphoma is in the chest area, or
- have problems with indigestion, experience tummy pain or weight loss if NHL is in the stomach or bowel.

If lymphoma has spread to the bone marrow where blood cells are made, it can reduce the number of blood cells causing:

- tiredness (too few red blood cells)
- vulnerability to infection (too few white blood cells)
- bruising or bleeding (too few bloodclotting platelets).

However, the above symptoms are not unique to lymphoma. For example, enlarged lymph nodes are much more likely caused by infection. Tell the doctor your symptoms. Only medical tests can confirm or rule out cancer.



Types

NHLs can be classified in many ways. For our purpose, they are most easily understood as either 1. the type of cells which turn bad, or 2. if the cancer develops slowly or rapidly:

1. B-cell type or **T-cell** type: according to whether NHL begins in B-cell lymphocytes or T-cell lymphocytes. B-type which accounts for about 90% of NHLs and has two common categories: diffuse large B-cell lymphoma; follicular lymphoma.

2. Aggressive (fast growing) type or **indolent** (slow growing) type: The former exhibits severe symptoms requiring prompt treatment, while the latter has few symptoms and may not need treatment for months or years.

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Staging

If cancer is found, tests will be done to assess how extensive the disease may be (its 'stage'), which is one of the most important factors in deciding on treatment.

Cancer cells spread in the body via three channels:

- grow into nearby areas via tissues
- get into the lymph system and are carried by lymph vessels to other parts of the body
- enter the blood and are carried by blood vessels to other parts of the body.

The stage of a cancer is a label used to describe the size and the extent of its spread. A commonly used staging system for NHL is 1, 2, 3 and 4 (or Roman numerals I, II, III, IV) with a larger number denoting a more extensive disease.

- Stage 1: Lymphoma found in one lymphatic area (lymph nodes, tonsils, thymus, or spleen).
- Stage 2: Lymphoma found in two or more lymph node groups but all affected nodes on same side of (either above or below) the diaphragm (the thin muscle below the lungs that helps breathing and separates the chest from the abdomen).
- Stage 3: Lymphoma found in lymph nodes both above and below (on both sides of) the diaphragm.
- Stage 4: Lymphoma found in one or more organs not in the lymphatic area, i.e. outside lymph nodes, tonsils, thymus or spleen; or in an organ that is not in the lymphatic area and has spread to lymph nodes far away from that organ; or in the liver, bone marrow, cerebrospinal fluid (CSF), or lungs.

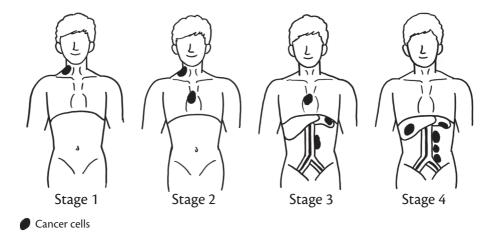
Stages 1 and 2 are sometimes called early/limited/localised stages while stages 3 and 4 indicate advanced stages.

To fine tune the main staging number 1-4, two alphabets may be attached to its right.

The first alphabet is A or B: if you have none of the three most common symptoms, weight loss, fever and night sweats of lymphoma, the letter to add is A (e.g. stage 1A); or if you have one or more of these symptoms, use B (e.g. stage 1B).

The other alphabet is E (extra nodal) or S (spleen). E means cancer is found in an area or organ external to (other than) the lymph nodes, and S means lymphoma is found in the spleen. E.g. 1E means that in addition to lymph nodes, cancer is also found in a nearby organ/area on the same side of the diaphragm while 3S means in addition to lymph nodes on both sides of the diaphragm, cancer is also found in the spleen.

In addition to stages 1-4, the spread of NHL can sometimes be described by whether the cancerous lymph nodes are contiguous (adjacent) to each other or noncontiguous (not adjacent) but on same side of the diaphragm.



Diagnosis

Common tests

In general, a few of the tests discussed in this section are sufficient for confirming or ruling out cancer. Which tests to take depends on your situation as seen by the doctor.

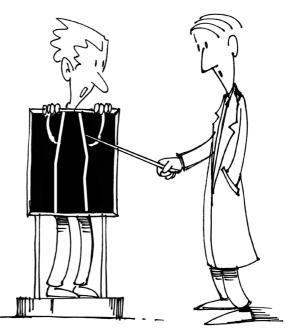
Physical exam and imaging scans: Blood tests, chest x-rays, and other common tests. May be taken to assess your general health, paying special attention to lumps or things that seem unusual. You will also be asked about your medical history.

Blood and urine antibodies studies: A higher or lower-than-normal amount of certain antibodies can be a sign of disease.

Blood viscosity test: Lymphoma may generate an excessive amount of antibodies making the blood very thick.

Flow cytometry:

To measure the number of cells in a sample, and examine the size and shape of tumour markers on the cell surface. The cells are stained with a lightsensitive dye, placed in a fluid, and passed in a stream before a laser or other type of light. The measurements are based on how the light-sensitive dye reacts to the light.

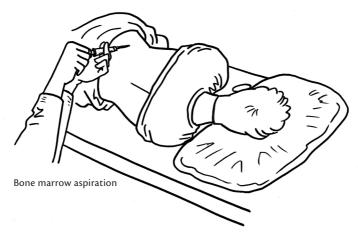


Lymph node or tissue biopsy: The most important test to confirm a diagnosis of lymphoma or cancer. A lymph node or small piece of body tissue is removed from the area of concern under local or general anaesthetic and examined under a microscope, possibly accompanied by lab tests. In the case of lymphoma, which will often begin in lymph nodes, a biopsy is usually done by removing all (excisional) or part (incisional) of an enlarged lymph node. It may take two weeks to know the results

Immunohistochemistry: Immunohistochemistry is a technique that uses antibodies – matching molecules – that can seek out, identify and attach themselves to these markers on cells. The antibodies themselves are designed to work with tags that can be detected or seen under a microscope, such as fluorescent staining, which helps to make a precise identification.

Cytogenetic Analysis: Cells are viewed under a microscope to look for certain changes in the structure or number of chromosomes in the lymphocytes.

Immunophenotyping: Immunophenotyping refers to the technique of identifying molecules that are associated with lymphoma cells and that help to characterise them. The molecules are identifiable because, in almost all analysable cases, they are expressed on the outer cell surface membrane.



Bone marrow aspiration and biopsy: You lie on your side on a couch. A long, hollow needle (Jamshidi) is inserted into the back of the hipbone (pelvis) or breastbone under local anaesthetic to collect bone marrow for examination under a microscope to determine if the cells are cancerous. The collection process takes about 15–20 minutes and can be done in the doctor's clinic. Take a mild painkiller if you feel sore in the following few days.

Lumbar puncture or spinal tap: You lie in a curled position on a couch. A long, thin needle is inserted into the spinal column under local anaesthetic to collect cerebrospinal fluid (CSF) to see if it contains cancer cells. Insertion of the needle can cause a tingling down the back of your legs. Take a mild painkiller if you experience headaches in the following few days.

Further tests

If the previous tests, especially a biopsy, find cancer, you may be given some of the following tests to determine its stage (see section on staging), that is if cancer cells have spread within the lymph system or to other parts of the body:

Complete blood count (CBC): To assess the overall condition of your blood by counting the numbers and types of various blood cells.

Blood chemistry study: To check if the amounts of certain substances released into the blood by various organs/tissues are higher or lower than normal which can be a sign of disease in the organ/tissue that makes it.

Endoscopy: A common procedure used to examine body cavities/passages like the stomach, bowel, lungs, bladder, uterus for abnormalities and to take a tissue sample (biospy) when necessary. Endoscopy carries different names according to the body cavity/passage being examined, for example, colonoscopy for the colon and rectum, and bronchoscopy for the lung. The procedure for all endoscopies is basically the same.

Under anaesthesia, a long narrow tube with a light, camera lens and possibly a tiny surgical knife/chisel at the tip is inserted into a body opening like the mouth, nose, anus and up or down the body passage to reach the area under examination. What the lens sees is transmitted via an optic fibre attached to a screen in the operation room. If any abnormality is found, a tissue sample will be taken using the tiny knife/chisel for close examination by a pathologist to see if there are cancer cells present.

When used for lymphoma, the endoscope is usually inserted into the oesophagus, stomach or upper trachea.

PET CT Scan: Positron emission tomography (PET) offers a highly detailed view of the body functions at cellular levels. By injecting small amounts of radioactive materials (radiotracers) into the vein, usually a radioactive glucose solution, the doctor can detect how the radiotracer is distributed in the area of the body being studied. Cancer cells have higher metabolism activity than normal cells. Those areas will accumulate more radiotracer and appear more dense on the PET scanner. Thus PET scans can tell how a certain part of your body is working, rather than just how it looks.

A PET scan is an imaging technique for the whole body. It is particularly helpful to determine how far the cancer has spread, although this scan may not be suitable for all patients.

The amount of radiation you're exposed to during a PET scan is slightly higher than a localised CT scan. Your doctor will only ask you to go for a PET scan if it will benefit your situation. You are not recommended to undergo a PET scan without medical referral.

MRI (magnetic resonance imaging):

Uses radio waves emitted from a machine with a large magnet to obtain detailed pictures of internal organs and tissues. Also known as nuclear magnetic resonance imaging or NMRI.



About scan/imaging

Before the scan, you will be asked not to eat or drink for a few hours and then given a drink or an injection of a dye, which allows your organs and tissues to be seen more clearly. This may make you feel warm all over the body for a few minutes. Tell the doctor if you have asthma or are allergic to iodine to avoid a strong reaction to the injection.

Imaging scans cause no pain. You simply lie in the hollow cylinder for up to about 30 minutes. As with x-ray, you will be asked to remove metal belongings including jewellery. Since the scanner generates noise when rotating, you may be given earplugs or headphones. Let the doctor know if you are not comfortable with enclosed spaces (claustrophobia), especially in the case of MRI.

CT and MRI will not make you carry radiation. Feel free to embrace your family and meet people.

Treatment

Treatment

The choice of treatment for lymphoma depends mainly on:

- Its type
- Its stage (location and spread)
- Whether it grows slowly (indolent) or quickly (aggressive)
- Your age
- Your other health problem(s)
- Whether it is first diagnosed or recurring (coming back)
- The side effects you are prepared to accept.

Before deciding on a treatment offered by your doctor, make sure you understand your chance of recovery (prognosis) and possible side effects. Tell the doctor if you have doubts.

Treatments for NHL are in general effective and side effects can be controlled, but the actual benefits may vary for each person.

Treatment options for NHL are best discussed according to the growth rate (indolent or aggressive) and spread (stage) of the cancer:

In B-cell lymphoma, a protein, CD20, is expressed on the lymphoma cells, which may be targeted by a therapeutic monoclonal antibody (explained later in this section). When given in conjunction with chemotherapy, enhanced lymphoma cell killing will be achieved. This is particularly important as most lymphomas in Hong Kong are B-cell NHLs.

Indolent NHL

Indolent NHLs are in general very responsive to chemotherapy and radiotherapy. Cases can often be controlled for many years, resulting in a good quality of life. Since the cancer grows slowly, especially in its early stage, doctors sometimes suggest regular check-ups only (called watch and wait or active surveillance) to avoid side effects until symptoms appear.

Indolent NHLs have 4 stages (see section on staging) in which stages 3-4 (advanced) cases are about 4 times more common than stages 1-2 (early) cases in newly diagnosed patients.

Indolent stage 1 and contiguous stage 2:

Cancer is localised in a few adjacent lymph nodes. Besides watch and wait, the first treatment is often radiotherapy. Options may include:

- Watch and wait if no symptoms
- Radiotherapy to the affected lymph nodes
- Chemotherapy in combination with radiotherapy
- Monoclonal antibody therapy alone or with chemotherapy

Indolent, non-contiguous stage 2-4:

Since the various cancerous lymph nodes are not next to each other, chemotherapy is called for, sometimes together with monoclonal antibody therapy. This can often shrink the cancer and remove the symptoms (remission). Options may include:

- Watch and wait if no symptoms
- Combination chemotherapy (almost always contains steroids)
- Monoclonal antibody therapy alone or with chemotherapy
- Radiolabeled monoclonal antibody therapy

After some years, if lymphoma returns, chemotherapy can often be used to shrink it again, giving you another period of remission. In this way, indolent NHL may be controlled for years, even decades.

Aggressive NHL

Being fast growing, aggressive NHL requires prompt treatment. Options may include:

- Combination chemotherapy with monoclonal antibody therapy
- Radiotherapy may follow combination chemotherapy.

Chemotherapy in combination with a monoclonal antibody therapy can often shrink the cancer very quickly.

In case the aggressive NHL spreads to the brain or has a high risk of doing so, chemo drugs may be injected into the spinal fluid (intrathecal chemotherapy).

Many people with aggressive NHL are cured. Even if it returns, treatment can sometimes put it back into remission with a more intensive treatment, such as high-dose chemotherapy.

Recurrent (coming back) NHL

Generally speaking, NHL which comes back after treatment can appear as indolent or aggressive regardless of whether it first started as indolent or aggressive. But the case of aggressive NHL returning as indolent is literally non-existent.

A. Indolent coming back as indolent

Treatment may or may not be indicated, depending on the symptoms, and age or concurrent illnesses of the patient. Options may include:

- Single or multi-agent chemotherapy with monoclonal antibody therapy
- Radiation therapy for very localised disease
- Monoclonal antibody alone (almost always concurrently given with chemotherapy for the synergistic benefit)
- Radiolabelled monoclonal antibody

B. Indolent coming back as aggressive

Various combinations of chemotherapy, radiotherapy, monoclonal antibody therapy and stem cell transplant are being tested for better results and less side effects. An optimal treatment is still pending.

C. Aggressive coming back as aggressive

• Usually treated by monoclonal antibody therapy with combination chemotherapy followed by autologous stem cell transplant.

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Chemotherapy

Chemo for short. The most common treatment for NHL. Anti-cancer (cytotoxic) drugs are used to kill cancer cells or prevent them from dividing. Sometimes called chemoradiation when used in combination with radiotherapy.

Depending on the type and stage of the lymphoma, chemo drugs can be:

- Taken orally as tablets or capsules, or injected into a vein (intravenously or IV) so as to travel along the bloodstream to reach cancer cells throughout the body (systemic chemotherapy).
- Placed into the cerebrospinal fluid (intrathecal chemotherapy), an organ, or a body cavity such as the abdomen, to act directly on the cancer cells in the target areas (regional chemotherapy).
- For some aggressive NHLs, or when NHL is found in areas such as the testicles, chemo drugs may be injected into the spinal fluid with a technique similar to a lumbar puncture to reduce the risk of cancer cells reaching the brain. Known as intrathecal treatment, it can also be used to treat lymphoma already spread to the brain.

Most people receive their chemotherapy as an outpatient. A combination of several drugs is normally given over a few days followed by a rest period of a few weeks. This is known as a cycle of treatment, allowing your body and blood cells to recover from side effects.

Depending on the type and stage of the lymphoma, a course of chemotherapy usually lasts 3-6 months with regular check-ups in between.

Intravenous chemotherapy

Depending on the type and stage of the lymphoma, chemo drugs can be administered via:

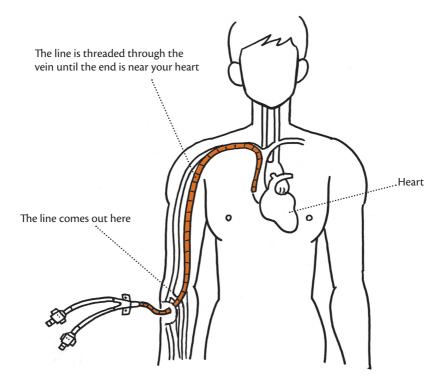
• Cannula

A small, plastic tube inserted into a vein in the back of your hand or lower arm. It is inserted just before each chemo session and taken out after the session on the same day, repeating this process in each daily session.

• PICC (peripherally inserted central catheter) line

Under local anaesthetic, a long, thin tube is inserted into a vein just above the bend in your arm and threaded up to a large vein in your chest.

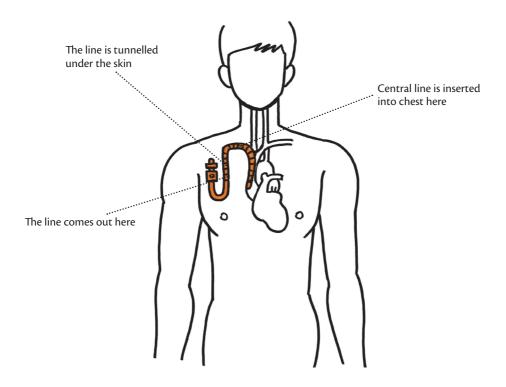
A PICC line stays in place throughout the course of treatment. It is easily removed after use.



• Central line (central venous catheter)

Under local or general anaesthetic, a long, thin tube made of silicone rubber is inserted into a large vein in the chest. The other end of the tube is tunnelled under your skin and comes out of your chest. Also called skin-tunnelled central venous catheters.

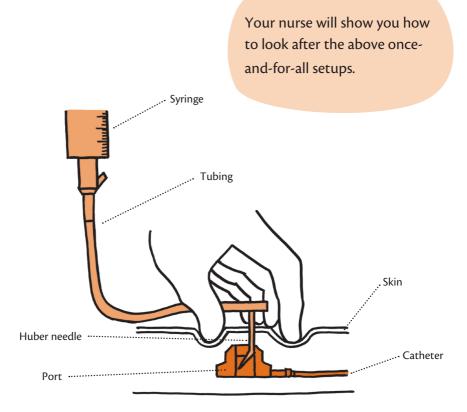
A central line stays in place throughout the course of treatment, saving you the pain of repeatedly inserting a needle everyday. To remove the line after completing the treatment, local anaesthetic may be used.



• Implantable port

Under local or general anaesthetic, a thin tube is inserted into a large vein in your chest. The tube ends in a small port just under the skin of your chest. The port can be used to give chemotherapy and other drugs as well as to take blood samples.

The port stays there for the entire course of treatment. To remove it after use, local anaesthetic may be used.



Regional chemotherapy

Chemotherapy drugs are injected into a specific region to treat that particular area, such as cerebrospinal fluid, organs or body cavities.

Intrathecal chemotherapy

Similar to a lumbar puncture, anticancer drugs are injected directly into cerebrospinal fluid via a small numbed area of the lower back.

Intrathecal chemotherapy may reduce the risk of aggressive Non-Hodgkin's lymphoma, or lymphoma near the testes, spreading to the brain. This treatment is also used in cases where cancer has spread to the brain (brain metastasis).

Chemotherapy can be received in a hospital day care centre or clinic, you are not required to stay overnight in hospital. A treatment phase means a period of consecutive treatment days, following which, you will rest for a period of time to recover from any side effects and rebuild a normal blood count. Depending on the staging and grading of the lymphoma, the treatment period can vary from 3 to 6 months. To assess treatment results, the patient's health condition will be closely monitored throughout the treatment period.

Side effects of chemotherapy

Different chemo drugs may induce different side-effects. The three most common side effects are hair loss, nausea and vomiting, and marrow suppression (and hence reduced blood counts or neutropenia).

Nausea and vomiting are now effectively prevented by drugs before administering chemotherapy.

Low blood counts, if severe, could be serious because of potentially dangerous infection and bleeding. Your blood count will usually return to normal in time before the next course of treatment which generally takes 2-3 weeks.

If white blood cell count is still low, which often occurs on the 7th to 10th day after starting chemotherapy, you may be given injections of subcutaneous growth factor to boost their number before proceeding to the next treatment.

Additionally, damage to heart function (hence heart failure), to nerve endings (hence numbness) or to kidneys (renal failure) may be associated with specific chemo drugs.

Generally, chemotherapy is given as a "regimen", i.e. combo of several drugs, for maximal effectiveness. Therefore, drugs with different side effects will be combined.

You may refer to the booklet "Chemotherapy" which can be read in our CancerLink support centres or downloaded from www.cancer-fund.org/ booklet/en for free.

Since people's reaction to side effects vary with their response to treatment, make sure you understand any possible side effects before deciding on a treatment.

To reduce the risk of infection when white blood cell count is low:

- Eat only thoroughly cooked food
- Wash hands after using the toilet and before preparing food or eating
- Avoid people with cold, flu or other infection; stay away from crowded places
- Avoid using wooden utensils in which bacteria are often easily found

If infected when your white blood cell count is low, your situation can deteriorate very quickly. See a doctor immediately if you:

- Have a fever above 38°C
- Suddenly feel unwell, even though your body temperature is normal
- Suffer from nose bleeding, bleed heavily from minor cuts and grazes, or if a rash of tiny pinprick-sized reddish-purple marks appears on the skin (petechiae). You may need a platelet transfusion for lack of these blood-clotting cells.

Nausea (feeling sick) and vomiting (being sick):

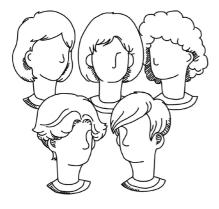
Can usually be reduced by prescribing anti-sickness (anti-emetic) drugs. But not all chemo drugs have the same side effects. Ask your doctor for an alternative if nausea persists.



Feeling tired (fatigue):

Tiredness can build up over a course of treatment. Try to cut down on activities and seek help with housework. Balance rest periods with gentle exercise.





Hair loss:

Many chemo drugs can make you lose hair. The extent varies widely with the drug, ranging from no noticeable loss to almost complete loss. But the effect is usually temporary.

If hair comes out during chemotherapy, it usually grows back in 3–6 months after treatment. During the interim period, you may wear a wig, hat or scarf.

Sore mouth:

Some chemo drugs can make your mouth sore or cause ulcers. Keep your mouth and dentures clean during treatment. To avoid irritating the lining of your mouth, use a soft-bristle toothbrush and alcohol-free mouthwash.

If you find eating difficult with a sore mouth, try soft and moist foods. Avoid spiced, salty or crunchy foods.

Ask your doctor to check your mouth for possible infection and prescribe mouthwashes and medicines to sooth the problem if necessary.



Taste changes:

Constipation:

Some chemo drugs and anti-sickness medicine given with chemotherapy can cause constipation. Tell the doctor if drinking plenty of fluids, eating more fibre, keeping active and taking laxatives do not help.

Some chemo drugs may temporarily change your taste. Some foods may lose their taste, taste different or even unpleasant. Your normal taste usually comes back within a few weeks after treatment. You may refer to the booklet "Diet and Cancer" which is available at our CancerLink support centres and can be downloaded from www.cancer-fund.org/booklet/en for free.

Change in sensation in hands and feet (peripheral neuropathy):

Tell your doctor if you feel tingling or numbness, or have difficulty in handling small objects like buttons. This may continue for some months after treatment before gradually getting better.

Contraception:

Chemo drugs may harm a developing baby. To have sex within 48 hours of chemotherapy, use a condom to protect your partner from chemo drugs that may be present in semen or vaginal fluid. Use contraception during treatment and for a few months afterwards. Ask your doctor for details.

Lack of energy:

Because of a reduction in red blood cells (anaemia), even walking or climbing stairs can make you breathless. You may be given a blood transfusion if symptoms cause worry.



Steroid therapy

Steroids like prednisolone are often given with chemotherapy as part of the lymphoma therapy. But it also helps you feel better and reduces sickness (nausea).

Possible side effects and amendments are:

- Indigestion: try taking steroids with food or ask your doctor for medication to prevent it. Tell your doctor if you have stomach pain while taking steroids
- Increased appetite
- Increased energy or feeling restless
- Difficulty in sleeping: try taking steroids in the morning with food
- High blood sugar levels: in addition to blood or urine tests during treatment, tell the doctor if you get very thirsty or are passing more urine than usual.

Because of changes in steroid levels, some people may feel tired, have aches and pains, and feel low in mood after finishing a course of steroids. This will usually get better within 2-3 days.

Monoclonal antibody (target) therapy

Antibodies are substances made by the body to defend against infection. They can identify and destroy harmful cells. Monoclonal antibodies are their man-made analogues which target and attach to substances expressed on cancer cells, ultimately killing the bad cells, blocking their growth, or keeping them from spreading.

Given by infusion, monoclonal antibodies may be used to kill cancer cells directly or to carry chemo drugs or radioactive material for this purpose. When joined to radioactive material, they are called radiolabeled monoclonal antibodies.

One of the best known monoclonal antibodies for NHL is rituximab (Mabthera®). It is used to treat the two most common types of B-cell NHL: follicular lymphoma and diffuse large B-cell lymphoma.

Rituximab binds to a protein called CD20 on the surface of B type cancer cells to destroy them . Effect can sometimes be enhanced when used together with chemo drugs.

The number of healthy B-cell lymphocytes will be temporarily reduced during treatment but will gradually return to normal.

Rituximab is often the first treatment for indolent B-cell NHL, particularly follicular lymphoma. Used alone, it is given once a week for about four weeks. But if a combination with chemo drug is found effective, some will use it for up to two years, hoping to keep the cancer away.

Some aggressive NHLs, such as diffuse large B-cell lymphoma (DLBCL), are also treated with rituximab-chemo combination.

To treat recurrent B-cell lymphomas, radioactive molecules are sometimes attached to monoclonal antibodies to give a dose of radiation directly to lymphoma cells (radiolabelled monoclonal antibodies).

Side effects of monoclonal antibodies

- Reaction to infusion, especially the first time: high temperature (fever), shakes (rigours), rash, low blood pressure, and feeling sick (nausea). To minimise reaction, the first infusion will be given very slowly. Reactions to the second and third infusions are usually less. You may be given medication to help reduce any possible reactions.
- Reduced number of blood cells: most likely to occur when used together with chemo drugs, or with radiolabelled monoclonal antibody therapy. See section on side effects for more information.

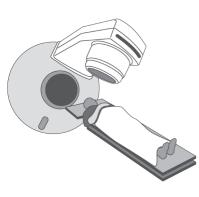
Biological therapy

Substances made by the body or in a lab are used to boost, direct, or restore the body's natural defence against cancer. Also called biotherapy or immunotherapy. An example is to use interferon to disrupt the division of cancer cells.

Radiotherapy

Radiotherapy shoots targeted high-energy rays at the tumour to destroy cancer cells while doing as little harm as possible to normal ones. Like having an x-ray, it causes no pain and will not make you radioactive. It's safe for you to be with other people, including children, throughout your treatment. Depending on the type and stage of the cancer, it can be given externally using a machine outside the body to send radiation toward the tumour or internally by inserting needles, seeds, wires, or catheters sealed with radioactive substance into the body at or near the tumour.

Areas next to the tumour will be protected from the radiation. For example, dental problems will have to be fixed before radiotherapy if the area of concern is around the nose; your lower abdomen will have to be shielded to preserve fertility if the abdomen is to receive radiation.



Radiotherapy is usually given in the hospital as daily sessions, with a rest period after several sessions. A course of treatment generally takes no more than three weeks, but the exact length varies with the type and stage of the cancer.

Our booklet on Radiotherapy has more details.

For lymphoma, radiotherapy may be used when cancer cells are found only in one or two groups of lymph nodes limited to one part of the body.

If indolent NHL is found in just one group of lymph nodes, radiotherapy may be the only treatment required.

Radiotherapy is sometimes used after chemotherapy, especially if the original lymphoma is large.

If indolent NHL re-appears after treatment in one area of the body, radiotherapy may sometimes be used instead of chemotherapy.

Planning radiotherapy

Radiotherapy requires careful prior planning for best results.

At the start, you may be given a CT scan to build up a three-dimensional (3D) picture of the treatment area. The radiographer who operates the highenergy ray machine may also take your personal measurements.

You may not need a CT scan if the area to be treated is in the skin or near the skin's surface.

To aim the beam precisely, the radiographer may draw tiny marks and/or ask permission to make small 'tattoos' on your skin. If you don't want to have permanent marks, ask for other options.

Treatment sessions

The radiographer will help you settle comfortably into the position chosen for you in the planning stage before turning on the beam. During the few minutes the beam acts on you, all you have to do is to lie still.

While alone in the machine room, you will be able to talk to the radiographer in the next room monitoring your situation on a screen.

Men who want children can use a lead shield to help protect the testes when treating the abdomen with radiotherapy.

Side effects

Except tiredness, most side effects come from the body parts treated and their extent depends on the amount of radiation received.

Tiredness (fatigue):

Generally begins towards the end of treatment and can continue for several weeks afterwards.

Nausea (feeling sick) and vomiting (being sick):

Often occurs when the abdomen is treated and sometimes includes a loss of appetite or diarrhoea. Prescription anti-sickness (anti-emetic) drugs and replacing meals with nutritious high-calorie drinks recommended by your doctor can help.

Sore mouth/throat:

Often when neck is treated. Sometimes with change of taste.

Hair loss:

The area receiving radiation may lose hair temporary. For example, radiotherapy to lymph nodes in the neck may cause hair loss on the back of the neck. Depending on the dose and length of treatment, it can take up to 12 months for your hair to come back.

Long-term side effects are rare. Most problems will disappear gradually after



treatment. Let your doctor know if they linger on.

Surgery

Most NHL cases require treatment that can work in several areas of the body simultaneously, e.g. chemotherapy. Surgery is applicable only in the rare situation that lymphoma is localised in one area, or to remove lymph nodes in the neck that may still contain cancer cells.

Hodgkin lymphoma

Apart from having a special type of cancer cell called Reed-Sternberg, Hodgkin lymphoma (or disease) is not too different from non-Hodgkin lymphoma (NHL) in its symptoms, diagnosis and treatment.

In this section dedicated to Hodgkin, we will refer to the chapters on NHL whenever applicable but will also point out any differences.

As explained in the chapter on NHL, a definitive diagnosis of Hodgkin lymphoma is the sight of Reed-Sternberg cells in body tissues under the microscope.

Types:

In accordance with the World Health Organization (WHO), there is a major type of Hodgkin lymphoma called the classical, and a rare type called nodular lymphocyte-predominant.

Causes/risk factors:

Most Hodgkin patients have none. But two factors have been cited: poor immunity, e.g., people with HIV; previous exposure to the Epstein Barr virus (EBV), which causes glandular fever.

Symptoms:

Almost the same as NHL except possible lingering itching of the skin.

Diagnosis:

Apart from the presence of Reed-Sternberg cells, same as NHL.

Treatment:

Mainly treated with chemotherapy and radiotherapy. The majority of cases can be cured, even when the lymphoma is found in several different areas of the body.

What to ask the doctor

Make a list of questions to ask before going to the doctor for a diagnosis report or treatment suggestion. You may ask a relative or friend to go with you to help you take notes; they can also remind you of the questions you need to ask, or even help you ask the questions. If you do not understand what the doctor says, ask them to explain until you do understand. Some people may want to record the conversation or video it.

Before doing that you must obtain the consent of the doctor, who can reject the request. In a public hospital, you will need to get the consent of the Hospital Authority. The following are common questions to ask.

1. What type of cancer is it?

2. Is it likely to have spread to other parts of my body?

3. What is the best way to treat it, and what is the likelihood of it being treated successfully?

4. Why is the treatment you are recommending the best? Are there alternatives? How do they differ?

5. I have heard that cancer treatments include surgery, radiotherapy and chemotherapy. Would it be best for one method to be used in my case or multiple treatments?

6. How long will the treatment take? Will I need to stay in hospital? How is my life likely to be affected? Will I need to quit my job?

7. Are the side effects serious? Are there ways to relieve them? Are the side effects permanent?

8. How much will the treatment cost, and will it be covered by my insurance?

9. How will we know if the treatment has been successful?

10. After the treatment, how often will I have to visit the doctor? What regular check-ups will I need?

11. What are the implications if I don't undergo treatment now but change my mind later?

12. After treatment, will my body be so weak that I won't be able to work? Will I still be able to take care of my children?

13. How likely is a relapse? Will there be any scarring left after treatment?

14. Can this type of cancer be inherited? If so, what are the chances of my children getting this cancer?

15. During treatment, will it be okay for me to consult a Chinese herbal practitioner for advice? Would the two types of treatments have a bad interaction?



Your feelings

Understandably, most people feel overwhelmed when they are told they have cancer. Many different emotions arise that can cause confusion and frequent mood changes.

This does not mean, however, that you are not coping with your illness. Reactions differ – there is no right or wrong way to feel. These emotions are part of the process that many people go through in trying to come to terms with their illness. Partners, family members and friends often experience similar feelings and frequently need as much support and guidance in coping with their feelings as you.

Shock and disbelief

"I can't believe it!" "It can't be true!"

This is often the immediate reaction when cancer is diagnosed. You may feel numb, unable to believe what is happening or to express any emotion. You may find that you can take in only a small amount of information and so you have to keep asking the same questions over and over, or you need to be told the same bits of information repeatedly. This need for repetition is a common reaction to shock. Some people may find their feelings of disbelief make it difficult for them to talk about their illness with their family and friends, while others feel an overwhelming urge to discuss it with those around them; this may be a way of helping them to accept the news themselves.

Anger

"Why me?" "Why now?"

Anger can hide other feelings, such as fear or sadness, and you may vent your anger on those who are closest to you and on the doctors and nurses who are caring for you. If you hold religious beliefs you may feel angry with your god.

It is understandable that you may be deeply upset by many aspects of your illness, so you should not feel guilty about having angry thoughts or being irritable. However, relatives and friends may not always realise that your anger is really directed at your illness and not at them.

If you can, it may be helpful to tell them this at a time when you are not feeling quite so angry or, if you find that difficult, perhaps you could show them this booklet. If you are finding it difficult to talk to your family, it may help to discuss the situation with a trained counsellor or psychologist. Hong Kong Cancer Fund can give you details on how to get help in your area. Call our service hotline on 3656-0800.

Denial

"There's nothing really wrong with me!" "I haven't got cancer!"



For many people, not wanting to know anything about their cancer, or wishing to talk as little as possible about it, is the best way to cope with the situation. If that is the way you feel, then just say quite firmly to the people around you that you prefer not to talk about your illness, at least for the time being.

Sometimes, however, it is the other way round. You may find that it is your family and friends who are denying your illness. They appear to ignore the fact that you have cancer, perhaps by playing down your anxieties and symptoms or deliberately changing the subject. If this upsets or hurts you because you want them to support you by sharing what you feel, try telling them how you feel. Start perhaps by reassuring them that you do know what is happening and that it will help you to talk to them about your illness.

Fear and uncertainty

"Am I going to die?" "Will I be in pain?"

Cancer is a frightening word surrounded by fears and myths. One of the greatest fears expressed by almost all people who are newly diagnosed is: "Am I going to die?"



Some people with cancer may be cured, but even if your cancer is not curable there are things that can be done to help you, both to relieve any pain or discomfort and to control the disease for some time. There is also help available to cope with the emotional aspects of cancer.

"Will I be in pain?" and "Will my pain be unbearable?" are other common concerns. In fact, some people with cancer experience no pain at all. For those who do, there are many drugs and other techniques that are successful at relieving pain or keeping it under control.

Most people are anxious about their treatment: whether or not it will work and how to cope with the possible side effects. It is best to discuss your individual treatment in detail with your doctor.

Often you will find that doctors are unable to answer your questions fully, or that their answers may be vague. It is often impossible to say for certain that the cancer has been totally eradicated. From past experience doctors may know approximately how many people will benefit from a certain treatment; however, it is impossible to predict the future for individuals. Many people find the uncertainty hard to live with, and this can be disturbing for them.

Uncertainty about the future can cause a lot of tension, but fears and fantasies are often worse than the reality. Fear of the unknown can be terrifying, so acquiring some knowledge about your illness can be reassuring, and discussing your findings with your family and friends can help to relieve the tension caused by unnecessary worry. You may gain authoritative medical information on the internet (make sure that the sources are reliable and accurate), or you may share your experiences with those who also have cancer. For more information, you may download our free cancer booklets at www.cancer-fund. org/booklet/en.

Blame and guilt

"If I hadn't... this would never have happened."

Sometimes people blame themselves or other people for their illness, or they try to find reasons for why it has



happened to them. This may be because we often feel better if we know why something has happened. However, as doctors rarely know exactly what has caused your cancer, there is no reason for you to blame yourself.

Resentment

"It's all right for you, you haven't got to put up with this."

Understandably, you may be feeling resentful and miserable because you have cancer while other people are well. Similar feelings of resentment may occur from time to time during the course of your illness and treatment for a variety of reasons.

Relatives, too, can sometimes resent the changes that your illness makes to their lives.

It is usually helpful to bring these feelings out into the open so that they can be aired and discussed. Bottling up resentment can make everyone feel angry and guilty.

Withdrawal and isolation

"Please leave me alone."

There may be times during your illness when you want to be left alone to sort out your thoughts and emotions. This can be hard for your family and friends who want to share this difficult time with you. It will make it easier for them to cope, however, if you reassure them that although you may not feel like discussing your illness at this time, you will talk to them about it when you are ready.



Sometimes an unwillingness to talk can be caused by depression. You can discuss this with your doctor, who can prescribe a course of antidepressant drugs or refer you to a doctor who specialises in the emotional problems of those with cancer. It is quite common for people with cancer to experience depression and there is no need to feel you are not coping if you need to ask for help.

Learning to cope

After any treatment for cancer it can take a long time to come to terms with your emotions. Not only do you have to cope with the knowledge that you have cancer but also the physical effects of the treatment. Cancer treatment can cause unpleasant side effects but some people do manage to lead an almost normal life during their treatment. You likely will need to take time off for your treatment and some time afterwards to recover. Just do as much as you feel like, and try to get plenty of rest. Do not see it as a sign of failure if you have not been able to cope on your own. Once other people understand how you are feeling, they can be more supportive.



What you can do

A lot of people feel helpless when they are first told they have cancer, and believe there is nothing they can do other than hand themselves over to doctors and hospitals. This is not the case. There are many things you and your family can do at this time.

Understanding your illness

If you and your family understand your illness and its treatment, you will be better prepared to cope with the situation. In this way you at least have some idea of what you are facing.

However, for information to be of value it must come from a reliable source to prevent it from causing unnecessary fears. Some people may offer advice and information based on their own experience, but remember, your disease pertains only to you and what is true for them may not apply to you. Personal medical information should come from your own doctor, who is familiar with your individual condition and background.

Practical and positive tasks

At times you may not be able to do things you used to take for granted. But as you begin to feel better you can set yourself some simple goals and gradually build up your confidence. Take things slowly and one step at a time.

One easy way of doing this is by planning a healthy, well-balanced diet. You may start by designing a balanced diet on your own or with your family. If necessary, you may consult a dietitian for advice. Another way is to learn relaxation techniques that you can practice at home. Many people find it helpful to partake in some form of regular exercise. The type of exercise you take, and how strenuous it is, depends on what you are used to and how well you feel. Set yourself realistic aims and build up slowly.

If you find it hard to follow a restricted diet or are not used to doing exercise, you can try to develop hobbies. Taking a walk after meals, going on a hike, taking a vacation, dancing, playing music, and gardening are some of the options you may consider.

You may download our Diet and Cancer booklet at www.cancer-fund.org/ booklet/en



Financial help

Cancer is a serious illness. Many people with cancer face not only the side effects of treatment and emotional trauma, but also financial difficulties. The disease can become a tremendous burden.

Apart from using public health-care services, you may approach medical social workers or the cancer patient resource centres in the major hospitals or institutions that might be able to provide assistance. The Comprehensive Social Security Assistance (CSSA) offered by the Social Welfare Department (SWD) may also be able to help solve your financial difficulties. You can call the SWD hotline on 2343-2255.

CancerLink FREE Service Hotline

Pregnancy and fertility

What if I am pregnant?

When a patient is pregnant, the safety of the mother and the fetus are of primary concern, reducing the options for both diagnosis and treatment. For example, one can only use ultrasound and MRI for diagnosis. CT and x-ray are ruled out because of radiation.

Most NHL cases during pregnancy are of the aggressive type. While prompt treatment is preferred, the final decision depends on the mother's choice and the age of the fetus.

Will I be infertile?

Chemotherapy and radiotherapy, and sometimes the lymphoma itself, can cause infertility, especially if the area being treated includes the abdomen.

The risk may not be permanent, but be sure to clarify with your doctor before treatment, preferably in the presence of your partner.

Call us at 3656 0800 if you wish to discuss fertility further with a social worker or trained counsellor.

Men

Chemotherapy: Some chemo drugs may reduce sperm count or affect their fertilising power. (You will still be able to orgasm and ejaculate normally.) Those who want children may consider storing their sperm before treatment.

Radiotherapy: Use a lead shield to protect the testes when treating the abdominal area.

Women

Chemotherapy: Some chemo drugs may temporarily or permanently make your ovaries stop producing eggs, causing the menstrual period to stop or become irregular during treatment. Your periods may return to normal afterwards. Make sure to use contraceptive both during and after treatment. The closer a woman is to her natural menopause, the more likely her periods will not return after chemotherapy.

For women whose periods have stopped, hormone replacement therapy (HRT) can reduce menopausal symptoms like hot flushes, dry skin, low sex drive, and dryness of the vagina but will not restore fertility.

Women who want children may consider storing fertilised eggs before treatment. Storing unfertilised eggs has a much lower success rate in conception later on. But this process can take several weeks depending where you are in your menstrual cycle. Your doctor will consider the risk of postponing treatment while your eggs are collected.

Women can sometimes have an operation to move their ovaries out of the treatment area before radiotherapy begins.

Coping with infertility

Fertility loss may make some people feel like they have lost part of their identity. Telling your partner or those close to you about your feelings can help to clarify your thoughts and give them an opportunity to support you through your journey.

Some people find it easier to talk to someone outside their immediate circle. If you wish to talk to a professional, call us on 3656 0800. Our cancer support specialists are always there to listen.

Talking to children

Deciding what to tell your children about your cancer is difficult. How much you tell them will probably depend on their age and how mature they are.



Very young children are concerned with immediate

events. They do not understand illness, and they need only simple explanations of why their relative or friend has had to go into hospital or why they are not their normal self. Parents can try to tell them they have cancer. It is important to let them know the proper cancer name so that the children can have a better understanding of the illness.

Slightly older children may understand a story explanation in terms of "good cells and bad cells". All young children are to be reassured repeatedly that the illness is not their fault, because whether they show it or not, children often feel they may somehow be to blame and may feel guilty for a long time.

Adolescents have a greater ability to comprehend. When they ask questions, parents should tell them the truth to prevent any misunderstanding. Children at this stage are forming their own identity. They may be more willing to communicate with their peers than their parents. In addition, they may not be willing to listen to their parents. They may find it particularly difficult to cope with the situation, because they feel they are being forced back into the family just as they were beginning to gain their independence.

An open, honest approach is usually best for all children. Listen to their fears and be aware of any changes in their behaviour. This may be their way of expressing their feelings. It may be better to start by giving only a small amount of information and gradually building up a picture of the illness. Even very young children can sense when something is wrong, so do not keep them in the dark about what is going on. Their fears are likely to be much worse than the reality.

Hong Kong Cancer Fund publishes an information booklet, *What do I tell the children*? which may be able to help you. You can request a copy by calling us on 3656-0800 and we will send it to you.

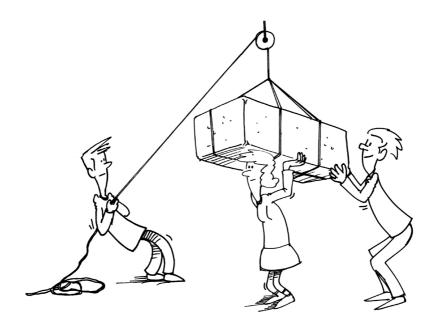
Hong Kong Cancer Fund's Rainbow Club is designed to help children who have a family member with cancer or who have lost someone to the disease. Through free playful activities, emotional support and a counselling service, we help them understand cancer and cope with changes in the family. A significant part of our role is to help both parents and children communicate on cancer and its impact. Call us on 3656-0800 for more information.

What to do if you are a relative or friend

Some families find it difficult to talk about cancer or share their feelings. But this can cause unnecessary fear and create tension between family members.

Relatives and friends can help by listening carefully to what, and how much, the person with cancer wants to say. Do not rush into talking about the illness. Often it is enough just to listen and let the person with cancer talk when he or she is ready.

Our booklet, *Talking to Someone with Cancer*, in the How to Cope section of our website is written for friends and relatives of those with cancer. It looks at some of the difficulties people may have when talking about the illness.



Who can help?

The most important thing to remember is that there are people available to help you and your family. Often it is easier to talk to someone who is not directly involved with your illness. You may find it helpful to talk to a counsellor who is specially trained to offer support and advice. Staff at Hong Kong Cancer Fund are always willing to discuss any problems that you might have and can put you in touch with a counsellor or a support group. Call us on 3656-0800 for more information.

Hong Kong Cancer Fund service network

Our five CancerLink support centres and seven cancer patient resource centres in major public hospitals provide free counselling, support and information to those in need. Together they form a seamless service network that meets the needs of people at different stages of their cancer journey.

• CancerLink support centres

We have five support centres outside the hospital setting that cater to the specific needs of those with cancer throughout the different stages of their illness. The centres – located in Central, North Point, Wong Tai Sin, Tin Shui Wai, and Kwai Chung – offer well-designed, holistic rehabilitation programmes that emphasise individual needs.

We also provide backing to 22 support groups, helping them to share resources so as to offer the best services to people living with cancer and their families. Our volunteer groups, formed by cancer survivors, pay visits to hospitals to provide emotional relief. More than 15,000 participants have joined our support network, which is divided into three groups – one for those with cancer, another for those with specific types of cancer (such as breast cancer, colorectal cancer and nasopharyngeal cancer), and another group for English speakers.

Care specialists – including registered social workers, registered nurses, registered dietitians, art therapists, counsellors and professional volunteers – are available to provide support, information and specialised services.

Private and family counselling is conducted by registered professionals to help those touched by cancer, their families and caregivers deal with the different emotional aspects experienced over the course of treatment.

There are also programmes and rehabilitation classes to develop coping skills, relaxation classes to help relieve mental and physical stress, and dietetic support to provide advice on nutrition.

Our comprehensive range of wellness programmes and therapeutic workshops helps users relax, tackle negative emotions, relieve stress, and restore confidence. We provide free classes, ranging from yoga and meditation to horticulture and insomnia management. The centres also feature well-stocked libraries.

"I managed to go through treatment but was worried about a relapse. A feeling of loneliness was haunting me. I felt especially grateful to have my support group, the members of which stood by me all the time."

CancerLink support centre user

Cancer patient resource centres

These are the first place many go for support and information after a diagnosis. Our registered nurses and social workers can offer both practical and emotional support, while the centres also provide booklets on navigating the cancer journey.

• Free service hotline

Managed by professionals, our service hotline is a channel through which to access advice on both physical and emotional difficulties. Talking with someone who understands can make a huge difference. The service hotline number is: 3656-0800.

> To learn more about cancer and how we can help, call the Hong Kong Cancer Fund on 3656-0800, or visit www.cancer-fund.org.

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We would like to express our gratitude to Chim Chor Sang James, S. H. Ho Professor in Haematology and Oncology, Li Ka Shing Faculty of Medicine, University of Hong Kong, for helping with the content of this booklet.

*Hong Kong Cancer Fund does not charge for health checks

Hong Kong Cancer Fund is a charitable institution, and all our services are FREE for people touched by cancer. We do not produce health products, nor do we charge for health checks, screenings or vaccines. Any company using our name to sell these services has no relationship with the Cancer Fund. For enquiries, call our service hotline: 3656-0800

Hong Kong Cancer Fund **CancerLink support centres**

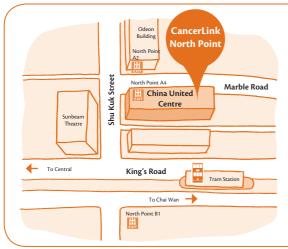




CancerLink Wong Tai Sin

Unit 2-8, Wing C, G/F, Lung Cheong House, Lower Wong Tai Sin (II) Estate,

Email: canlink@hkcf.org



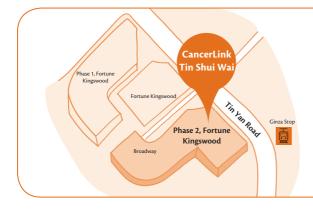
CancerLink North Point

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Email: canlinkcentral@hkcf.org

SATINU RESOURCES GROUP LIMITED

Special Thanks



CancerLink Tin Shui Wai

Shop 201C, 2/F, Fortune Kingswood Phase 2, 12-18 Tin Yan Road, Tin Shui Wai, New Territories

Email: canlink-tsw@hkcf.org



Hong Kong Cancer Fund Support Network

Self-Help Groups

CanSurvive

Helps: those with all types of cancers (English-speaking) Tel: 3656 0800

Hong Kong Pioneer Mutual Support Association Helps: those with all types of cancers Tel: 3656 0799

Hong Kong Cancer Fund

Partners Queen Mary Hospital Cancer Care & Support Unit

2/F, Professorial Block, Queen Mary Hospital, 102 Pok Fu Lam Road, Hong Kong Tel: 2255 3900 Fax: 2255 3901

Pamela Youde Nethersole Eastern Hospital

Cancer Patients' Resource Centre 1/F, East Block, 3 Lok Man Road, Chai Wan, Hong Kong Tel: 2595 4165 Fax: 2557 1005

Queen Elizabeth Hospital Cancer Patients' Resource Centre

Room 601, 6/F., Block R, Queen Elizabeth Hospital, 30 Gascoigne Road, Kowloon Tel: 3506 5393 Fax: 3506 5392

Princess Margaret Hospital Cancer Patients' Resource Centre

2/F. & 3/F., Block H, Princess Margaret Hospital, 2-10 Princess Margaret Hospital Road, Lai Chi Kok, Kowloon Tel: 2990 2494 Fax: 2990 2493

United Christian Hospital Cancer Patients' Resource Centre Block P, 130 Hip Wo Street, Kwun Tong, Kowloon Tel: 3949 3756 Fax: 3949 5595

Prince of Wales Hospital Cancer Patients' Resource Centre

3/F., Sir Yue Kong Pao Cancer Centre, Prince of Wales Hospital, 30-32 Ngan Shing Street, New Territories Tel: 2632 4030 Fax: 2632 4557

Tuen Mun Hospital Cancer Patients' Resource Centre Lower Ground, Tuen Mun Hospital, Tsing Chung Koon Road, Tuen Mun, New Territories

Tel: 2468 5045 Fax: 2455 1698

Other Organisations in Hong Kong

Social Welfare Department Hotline: 2343 2255

Rehabaid Centre Tel: 2364 2345 Email: rehabaidcentre@ha.org.hk

The Samaritans Tel: 2389 2222

Employees Retraining Board (ERB) – Smart Living Scheme Tel: 182 182 Email: erbhk@erb.org

The Chain of Charity Movement Community support and transportation services Can arrange visits and transportation to hospitals and shopping Tel: 2777 2223 Fax: 2777 2269

Emergency Number Emergency no.: 999

Government Ambulance Service Tel: 2735 3355 **Easy Access Bus**

Can arrange visits and transportation to and from hospitals/clinics for those aged 60 or above with mobility difficulties Tel: 2348 0608

Accessible Hire Car Provides a personalised service to passengers with their own wheelchairs Tel: 8106 6616

St. John Ambulance (24-hour service) Tel: 1878 000

The Jessie and Thomas Tam Centre -Society for the Promotion of Hospice Care Provides a bereavement counselling service Tel: 2725 7693 Email: jttc@hospicecare.org.hk

Comfort Care Concern Group Provides bereavement counselling for those who are terminally ill and their families Tel: 2361 6606

Email: cccg@cccg.org.hk

Lymphoma 71

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So no one faces cancer alone

FREE Service Hotline



www.cancer-fund.org

Hong Kong Cancer Fund

Service Hotline: 3656 0800 Donation Hotline: 3667 6333 Website: www.cancer-fund.org

Facebook: www.facebook.com/hongkongcancerfund

YouTube: www.youtube.com/hongkongcancerfund

