What is cancer?

Information on cancer for patients and family
Chapter 1

What is cancer and how does it develop?

Cancer is a disease where the cells grow abnormally, out of control, in the wrong place.

Our bodies are made from billions of cells, like bricks make a house. The cells in our bodies that make up the heart, lungs, kidneys, muscles and skin are all quite different.

When cells are damaged, they can start growing in a way that is not normal. The uncontrolled cells will form a lump called a tumour, or they travel inside the blood vessels (leukemia) or in the lymph nodes (lymphoma).

Cancer can affect men, women and children, young and old, rich and poor. You cannot catch cancer from someone else nor give it to others. With new methods of treatment, many more people recover from cancer now.

You can have cancer anywhere in the body, including the bones and the skin.
How do I know that I have cancer?
If you have one of the following problems for over 3 weeks and it is not getting better with ordinary treatment, you have to visit a doctor or a clinic.

CAUTION:
1. C hange in bowel or bladder habits (pain, difficulty urinating, blood)
2. A sore that does not heal
3. U nusual bleeding or discharge from private parts (women)
4. T hickening or a lump in the breast or elsewhere (neck, armpit, groin)
5. I ndigestion or difficulty swallowing
6. O bvious weight loss, sweating at night, bone pains
7. N agging cough or hoarseness, sometimes with blood when you cough
How does cancer develop?
Cells are constantly renewing themselves. Each day cells die and are then replaced by new cells; this is how we stay healthy. But sometimes during this renewing, a healthy cell changes into a cancer cell and starts growing out of control.

Tumour growth
When the tumour grows, some of the cancer cells damage normal cells, and can then move into different parts of the body. The cells that travel into other parts of the body are called metastases.
These cancer cells travel through the blood or the lymphatic system to distant parts of the body where they form new tumours. In this way, breast cancer can spread to the lung or the brain.

The doctor will speak of “stages”. This explains how much cancer is in a person’s body and where it is located. Stage 1 and 2 mean that the cancer is in an early phase, still small and responding well to treatment. Stage 3 and 4 show that the cancer cells have travelled in nearby other organs, or have spread through the blood vessels; it is more difficult to treat.
**How does the doctor find cancer?**

First, the doctor will listen to your story and do a physical examination. Then he can use a number of ways to find out if it is cancer or not.

- **Biopsy:** A small piece of the tumour is cut out and looked at under a microscope to determine the type of cancer.

- **Endoscopy:** Endoscopy is a medical procedure where a doctor puts a tube-like instrument into the body to look inside. There are many types of endoscopy, each of which is designed for looking at a certain part of the body.

- **CT scan or MRI scan:** The machine takes many pictures (x-rays) of the body taken from different angles. These pictures are combined to give a detailed picture of internal organs. Doctors are then able to look for tumours. The CT and MRI scan are painless.

- **Mammogram:** is a special type of low dose x-ray used to detect breast cancer. The breast is compressed (squeezed by a machine) during the procedure and so it may be a bit uncomfortable.

- **Bloods:** Sometimes cancer cells can be detected in the blood, and the doctor can see that there is cancer somewhere in the body. They are called *blood markers*.
Why do I have cancer?
It is difficult to know why certain people get cancer, and others don’t. Doctors use the term risk factors; things that damage the cells so they can grow into tumours.

Risk factors are:
- smoking cigarettes or using tobacco products like snuff, pipe or chewing tobacco.
- having been sunburned often
- some viruses: HIV, HPV and Hepatitis B virus
- unhealthy lifestyle: being overweight, limited physical exercise, too much alcohol, too many sugars and red meat, not enough vegetables and fruit.
- inheritance: a family history of cancer (some of your close relatives (father, mother, brothers or sisters) have had cancer: breast, bowel, melanoma and ovarian cancer)
- pollution, and toxins in the environment (dirty air and water, smoke and chemicals that we breathe in).

Why is it important to go to a doctor when you notice symptoms? (See “CAUTION”)
Many people recover from cancer every year, completely or temporary. Doing so is easier when cancer’s diagnosed at an early stage as treatment is often simpler and more likely to be effective. So finding cancer early can make a real difference.

Sometimes, people put off seeing their doctor because they’re worried about what the doctor might find. But it’s important to remember that advances in the way cancer is diagnosed and treated have led to real improvements over the years. The earlier, the better!

Do you want to know more? In the next pamphlet we talk about treatment for cancer: surgery, chemotherapy and radiotherapy. Never hesitate to ask a question about your health, body, treatment of anything else. Ask your doctor, nurse, radiotherapist, physiotherapist or social worker. And read the other chapters!
Chapter 2

Treatment of cancer

Medical treatment of cancer
The three most common types of treatment for cancer are: Surgery, chemotherapy and radiotherapy.

Surgery
A cancer tumour that has not spread can be removed. This is done by a surgeon during an operation. The tumour and sometimes some more tissue is taken out. Sometimes it is followed by radiotherapy (see below).

Not all cancers can be cut out; that’s where the doctors use medicines like chemotherapy.

Chemotherapy
Chemotherapy is the use of strong drugs to kill cancer cells. It is often called “chemo”. If the disease has spread in the body, or it is likely to spread, chemotherapy drugs are used. There are many types of chemotherapy, depending on the type of cancer, the stage and the patient.

Chemotherapy travels through the blood vessels and destroys the cancer cells. You can get chemotherapy as a drip, as pills or as an injection.

Sometimes chemo is the only treatment given, but often it is given before or after surgery, or together with radiotherapy.
Chemotherapy injection

Chemotherapy is usually administered in cycles with rest periods in between. A cycle may last one or more days. A cycle of treatments may be administered every 1 to 4 weeks. A whole course of treatment may comprise several cycles. Each course of chemotherapy is different, but usually comprises 4 to 6 cycles.

Chemotherapy drip

Radiotherapy is a form of x-rays that are killing the cancer cells. The x-rays are a lot higher dose than the ones used for pictures. Usually the patient has many, very short treatments (5-10 minutes). Normally it takes 1 to 8 weeks to complete, or it can be given as monthly treatments, depending on the type and stage of cancer.

Before the treatment the doctor carefully marks the place on the body where the radiotherapy must go.

Radiotherapy
Hormone therapy

Sometimes the doctor prescribes pills that you have to take for a long time after the treatment is finished. This is to stop cancer cells from starting to grow again. Hormones can also be given as a monthly injection or drip.

How does the doctor decide what treatment is best for me?

The doctor will think about a few different things before he chooses the best way to treat your cancer:

1. What type of cancer you have
2. How big the cancer tumour is
3. How fast the cancer is growing
4. Whether cancer has spread to other parts of your body, and if so, where it has spread to and how far it has grown in these other places.
5. Your age, symptoms and general health.

Doctors use a lot of information to help plan treatment. Although each person’s situation is different, cancers with the same stage tend to have similar outlooks and are often treated the same way.

Why should I go for treatment?

The doctor is always trying to cure the disease completely with the treatment. Progress in cancer treatment over the past 50 years has come up with better drugs, more combinations of drugs and better use of radiotherapy.

Sometimes though, the disease has already spread too far, and the cancer cannot be cured any more. Then the aim of treatment is to control the disease for as long as possible, giving you more time to enjoy a comfortable life. This is called “palliative” therapy.
Prognosis
The doctor will tell you how likely it is that your disease can be cured, and how long the treatment will take. This is based on his experience with many people with the same condition.

Remission
Remission is a complete or partial disappearance of the cancer, after treatment. The disease is under control, but is sometimes still present in the body, but “sleeping”. The doctor will check you regularly the rest of your life.

Side effects
Apart from killing the cancer cells, the treatment can also damage healthy cells. Luckily, healthy cells have the mechanism to recover. Discuss with your doctor if you experience anything unpleasant. There are medicines that help to ease the side effects.

Some side effects are:
Surgery:
- pain
- deformity (loss of a body part, eg breast)
- damage to muscles or nerves, leading to problems in moving the body properly
**Radiotherapy:**
- tiredness
- skin changes (dry, thin, stiff, sometimes a wound can develop)
- nausea, vomiting, diarrhea or loss of appetite, problems swallowing
- shortness of breath
- low red blood cells (anemia)

**Chemotherapy:**
- loss of hair
- low red blood cells (anemia)
- low white blood cells
  (infections like pneumonia or flu are more likely)
- pain (muscles, pins and needles in hands and feet)
- infertility (temporary)
- nausea, diarrhea, vomiting, loss of appetite, sores in the mouth, change of taste.

Blood tests are taken regularly each week of treatment to see if you need medicines or blood transfusions to help your body recover from the treatment.

In the next chapter, you will learn more about how to take care of your body during cancer treatment, and how to cope with this difficult time.

Never hesitate to ask a question about your health, body, treatment of anything else. Do you want to know more? Ask your doctor, nurse, physiotherapist or social worker. And read the other chapters!
Chapter 3

How do I take care of my body during cancer?

**Personal care**
When you have cancer, and get treatment for cancer, it is important that you take good care of your body. This will help your treatment to be more effective.

The cancer may make your body weak, you can have pain sometimes, or difficulty breathing, and sometimes people lose a lot of weight: it is not easy, but there are many ways and professionalists in the hospital to help you.

Healthy living is very important from now on!

Please discuss all your problems with your oncology doctor or other medical professionals. They will try their best to relieve your problems and give you the correct information.

**Healthy living**
As with all disease: if you are sick, you need all your strength to recover. That way you can fight the cancer better, and suffer less from side effects. Make sure you

- get enough sleep
- stop smoking and drinking alcohol. Get help if you need assistance
- eat a healthy diet, full of vegetables, fruits, whole grains and dairy
- wash fruit and vegetables well before eating them
- try to walk daily for 20-30 minutes to keep strong
- boil water from a river before drinking it or using it for cooking
- maintain a good personal hygiene to prevent infections
  - brush your teeth AND tongue. Rinse with salt water
  - bath daily
  - wash your hands after going to the toilet
  - cover your mouth when coughing or sneezing
  - avoid others who are sick with a virus, cold, or contagious disease
  - keep wounds dry, clean and disinfected
- socialize and find support from friends and family, talk openly about your worries, or join a support group.
**Skincare during radiotherapy** (always check with the radiotherapist):
- do not wash the area that has been marked for radiotherapy
- don’t rub the area too hard because this can make it sore
- don’t use perfume or perfumed soaps, talcs or lotions
- you can use unperfumed deodorant unless it irritates the skin
- try baby soap or liquid baby wash
- men having radiotherapy to the head and neck should use an electric razor instead of wet shaving
- do gentle stretching for 3 minutes exercises to prevent the muscles and the skin in the radiated area to become stiff. Ask your physiotherapist to demonstrate

**Clothing during radiotherapy**
During radiotherapy and for a while afterwards your skin may be sensitive. You may find it more comfortable to
- wear loose fitting clothes
- use clothes made of natural fibres
- avoid tight collar and ties if you had radiotherapy to your neck
- avoid shoulder and bra straps – go without a bra, wear a crop top or sports bra in a bigger size instead of a normal bra with shoulder straps

**Going outdoors during radiotherapy or chemotherapy**
Your skin is sensitive so try to avoid strong sun, wind or cold. As always, when exposed to the sun you should:
- use a high factor sunscreen
- wear a hat and long sleeved shirts

**Common problems and solutions**
If you have any of the following complaints, find advice from your medical professional straight away. The earlier a problem is treated, the better.

**Pain**
Pain can be caused by the tumor or as a result of treatment: a surgical wound, pain in the radiated area or from sores. Your doctor or nurse can help. Tell them where, when and how severe the pain is.
Pain can be well controlled with the right medication!
Diarrhea, nausea:
This is a very common side effect of chemotherapy, and of radiotherapy.
- Avoid caffeine, alcohol, dairy, fat, fiber, orange juice, prune juice, and spicy foods.
- Avoid laxatives and stool softeners.
- Eat small, frequent meals, and ask your dietician which foods are best to eat when you have diarrhea. Foods that are easy for the stomach to digest include bananas, rice, and toast.
- Drink plenty of water and other clear liquids to prevent dehydration.
Ask the doctor for medication to help.

Constipation:
Constipation occurs when a person cannot empty his or her bowels or has a feeling of needing to move the bowels but can’t. It is common after surgery to the bowel, and it is a side effect of some medication, especially morphine. Ask your doctor to prescribe medicine to help.

Loss of appetite and sores in mouth:
- try to eat small, frequent snacks rather than three large meals.
- cook your food soft, and even mash it to make it easier to swallow.
- use medication to keep the sores clean. Ask your doctor to prescribe.

Swelling of arm or leg or face (oedema):
This can happen because the tumor or a surgical wound is preventing the normal circulation in an arm or leg.

The arm feels heavy, full, the skin can be tight and hard and rings or sleeves feel tight. Sometimes there is tingling and you may notice difficulty using the arm. Speak to your doctor.

The physiotherapist can give you specific exercises and a bandaging technique to alleviate the swelling.

Weakness, fatigue, loss of feeling:
The treatment and the cancer are a challenge to your whole body, including the muscles and nerves. You may feel very tired and have problems moving normally, or have a tingling or burning sensation in your hands and feet. There is specific medication for this neuropathy. Ask your doctor about it.
**Difficulty breathing or breathlessness**
There can be several reasons for this problem, and they all need to be treated by the doctor.

The lung can be damaged (temporarily) by the chemotherapy or radiotherapy, or you can suffer from anemia (lack of blood cells). The body becomes more prone to infection, so a possible chest infection needs to be treated. Another reason can be that the lungs or abdomen are collecting fluid, which makes it difficult to breathe deeply.

Go to the nearest clinic or hospital if you are breathless!

---

**Who’s doing what in the hospital?**
There are many medical people involved in the treatment and support of patients with cancer. It is a team, consisting of the following professionals:

**Doctor**
- Makes individual treatment plan
- Prescribes medication (pain, nausea, infection)

**Nurse**
- Wound care, skin care
- Gives general information, medication

**Radiotherapist**
- Plans radiation and mark the spot(s) on your body
- Gives daily radiation
- check treatment, skin and side effects

**Dietician**
- Ensures optimum nutrition for patients undergoing or recovering from cancer treatments.
- Advises on problems with taking food (altered taste, sores in mouth)

**Physiotherapist**
- Assists with difficulties in moving, weakness, pain, joint mobility
- Treats oedema in arms and legs
- Assists with breathing and coughing

**Psychologist**
- Assists patients and families with dealing with the emotional and psychological consequences of being diagnosed with cancer and living with cancer.

**Speech-Language Therapist:**
- Assists with problems regarding your speech or swallowing (for instance when you are treated for mouth or neck cancer)

**Social Worker**
- Provides counselling, education and support to patients and their families to cope with cancer and its impact on relationships, work, school and community.

In the next chapter, you will learn more about how to take cope with cancer, and how to talk to and involve your loved ones for support.

Never hesitate to ask a question about your health, body, treatment of anything else. Do you want to know more? Ask your doctor, nurse, physiotherapist or social worker. Read the other chapters!
How do I cope with cancer?

An emotional time
Being diagnosed with cancer can be hard to accept. You are likely to go through a range of emotions before, during and after your treatment. This is very normal.

Shock
Shock is often the first reaction when a doctor tells someone they have cancer. You may:
- feel numb
- not believe what is happening
- be unable to express any emotion
- find that you can only take in small amounts of information
- ask the same questions repeatedly
- need to have the same information repeated to you

You may find it difficult to talk about your illness with your family and friends. Or you may find that you need to talk about it over and over again to help the news to sink in.

Denial
Some people may feel overwhelmed and cannot accept the diagnosis. You may find that you:
- don’t want to know anything about your cancer or treatment
- say that you have not been told about the diagnosis
This is a completely natural reaction. But in extreme cases, denial can be unhelpful. If this reaction starts to get in the way of your treatment or makes your overall situation worse, you may need professional help from a **psychologist**.

Sometimes you may need to talk about your cancer, but your family and friends may be the ones in denial. They may:

- seem to ignore the fact that you have cancer
- play down your anxieties and symptoms
- deliberately change the subject

**People can react in this way because they are frightened that someone they love has a life threatening condition.**

**Bargaining**
You may be filled with “What if …?” or “If only …” questions. You may desperately want an answer for why you have cancer. You may blame yourself or God.

**Depression**
You might feel sad, have suicidal thoughts, cry often, feel irritable/moody, experience changes in eating or sleeping habits and lose interest in activities you previously enjoyed. If these symptoms persist for more than 2 weeks, tell your doctor and ask for a referral to a psychologist.

**Anger**
You may be very angry that you have cancer and feel that you do not deserve it. The anger may be directed at yourself, your partner, family, medical staff or God. There is a sense of life is unfair.

**Acceptance**
Eventually you will come to accept that you have cancer and be able to focus on dealing with the diagnosis and treatments.
These emotional reactions are normal and you may move from one emotion to the next and back again during the course of the treatment.

**Coping with your emotional reactions**

Remember that each person is unique and will experience their own reactions to the diagnosis and cope in their own way and time.

Family may feel the need to be strong for the patient while ignoring their own pain. Each person needs space to express and deal with the emotions. Try to both offer and accept support from each other.

Don’t hide the illness from your children. Give them honest simple explanations such as “Mummy is sick and has to go for treatment every week to get better. The medicine can make me feel tired or throw up.”

*Don’t hide a disease from your children, but talk to them in simple and honest language.*

Children may go through similar emotions. Encourage them to express their feelings by talking about them with you/family member/teacher, drawing pictures of their feelings, and running around the house until their angry feelings have left them. Find healthy ways to express your emotions such as talking to loved ones, crying, writing down your thoughts and feelings in a book, praying, gardening or listening to music.

Avoid alcohol or drugs, which may dull the emotional pain temporarily but lead to further problems.

Try some relaxation techniques such as breathing deeply, visualizing being happy and coping, go down to a river, make a puzzle, meditation and exercise. Get spiritual support, pray together, visit your religious leader.

Join a support group for people with cancer, or speak with other persons who had cancer. Counseling by a social worker or psychologist can help you deal with your feelings and move forward.
Coping with everyday life

The cancer itself or the side effects of treatment can make it difficult for you to continue with your everyday tasks as you did before. It is important to talk about what you can manage doing, what you need help doing and what someone else can do for you.

• If there were family problems before the cancer diagnosis, things may not get any better after the diagnosis. The problems can actually get worse. However, some families come to a new understanding and have more love for one another as a result of overcoming a shared challenge like cancer. If there are family or relationship difficulties, a social worker or psychologist can help address these.

• You might need a family member or caregiver to assist you in caring for yourself while you undergo treatments and possibly thereafter. Speak to your doctor who can refer you to a social worker about options available in your area.

• Household chores and child care might be a challenge as well. The family may need to discuss how to redistribute tasks so that the responsibilities are shared. The social worker can arrange a family meeting to discuss these issues.

• Speak with your employer about changing your working times or responsibilities to accommodate your treatments so you can continue working. If this is not possible, then you can apply for benefits from your employer or Department of Labour. You can also speak with your doctor about your work responsibilities and whether you could qualify for a disability grant.

• Keep a list of symptoms, side effects and questions so that you can remember to tell the doctor about them at your next visit.

• If possible, take a friend or family member with you when you go for treatment. This will help with physical support; emotional support and making sure both of you understand clearly what the doctor/nurse says.
Acknowledgements

We thank the patients that we have worked with for their bravery and courage dealing with their disease and treatment, and their invaluable input in the production of this booklet. Siyabonga kakhulu!

The project was coordinated by Diane Mariah-Singh, Social Work Department and Elisabeth Raymakers, Physiotherapy Department, Grey’s Hospital, Pietermaritzburg, KZN, South Africa.

Contributions from the Multidisciplinary Oncology Team Grey’s Hospital:
- Oncology Department
- Radiotherapy Department
- Physiotherapy Department
- Occupational Therapy
- Speech and Audiology
- Social Work Department
- Department of Clinical Psychology
- Dietetics Department

With special thanks to:
- Bruce Potgieter - Grey’s Hospital, M3 Oncology ward
- Nonkululeko Mvemve - translation
- Kathy Arbuckle - UKZN Adult Education Department
- Cara Noble and Lisa Strydom - CanSA KZN

Resource list: websites and phone numbers
- Hospice Association: http://www.hpca.co.za
- Greys’ Hospital, http://www.kznhealth.gov.za/greyshospital.htm 033 897 3000
Check local churches and clinics for other resources.

© the authors, Diane Mariah-Singh and Elisabeth Raymakers
diane.mariahsingh@gmail.com / l.raymakers@gmail.com