UNDERSTANDING CANCER

Cancer begins in cells, the building blocks that form tissues. Tissues make up the organs of the body. Normally, cells grow and divide to form new cells as the body needs them. When cells grow old, they die, and new cells take their place. Sometimes, this orderly process goes wrong. New cells form when the body does not need them, and old cells do not die when they should. These extra cells can form a mass of tissue called a growth or tumour.

Tumours can be benign or malignant:

- **Benign tumours are not cancer:**
  - Benign tumours are rarely life-threatening.
  - Most benign tumours can be removed, and they usually do not grow back.
  - Benign tumours do not invade the tissues around them.
  - Cells from benign tumours do not spread to other parts of the body.
- **Malignant tumours are cancer:**
  - Malignant tumours are generally more serious than benign tumours. They may be life-threatening.
  - Malignant tumours often can be removed, but sometimes they grow back.
  - Malignant tumours can invade and damage nearby tissues and organs.
  - Cancer cells can break away from a malignant tumour and spread to other parts of the body. Cancer cells spread by entering the bloodstream or the lymphatic system. The cancer cells form new tumours that damage other organs. The spread of cancer is called metastasis.

When cancer spreads and forms a new tumour in another part of the body, the new tumour has the same kind of abnormal cells and the same name as the primary tumour. For example, if prostate cancer spreads to the bones, the cancer cells in the bones are actually prostate cancer cells. The disease is metastatic prostate cancer, not bone cancer. For that reason, it is treated as prostate cancer, not bone cancer. Doctors sometimes call the new tumour "distant" or metastatic disease.

RISK FACTORS

Doctors often cannot explain why one person develops cancer and another does not. But research shows that certain risk factors increase the chance that a person will develop cancer. These are the most common risk factors for cancer:

- Growing older
- Tobacco
- Sunlight
- Ionizing radiation
- Certain chemicals and other substances
- Some viruses and bacteria
- Certain hormones
- Family history of cancer
- Alcohol
- Poor diet, lack of physical activity, or being overweight

Over time, several factors may act together to cause normal cells to become cancerous. When thinking about your risk of getting cancer, these are some things to keep in mind:

- Not everything causes cancer.
- Cancer is not caused by an injury, such as a bump or bruise.
- Cancer is not contagious. Although being infected with certain viruses or bacteria may increase the risk of some types of cancer, no one can "catch" cancer from another person.
- Having one or more risk factors does not mean that you will get cancer. Most people who have risk factors never develop cancer.
- Some people are more sensitive than others to the known risk factors.

SCREENING

Some types of cancer can be found before they cause symptoms. Checking for cancer (or for conditions that may lead to cancer) in people who have no symptoms is called screening.

Screening can help doctors find and treat some types of cancer early. Generally, cancer treatment is more effective when the disease is found early.

Screening tests are used widely to check for cancers of the breast, cervix, prostate, colon, and rectum.

SYMPTOMS

Cancer can cause many different symptoms. These are some of them:

- A thickening or lump in any part of the body such as the breasts
- A new mole or a change in an existing mole
- A sore that does not heal
- Hoarseness or a cough that does not go away
- Changes in bowel or bladder habits
- Discomfort after eating
- A hard time swallowing
- Weight gain or loss with no known reason
- Unusual bleeding or discharge
- Feeling weak or very tired.

Usually, early cancer does not cause pain. If you have symptoms, do not wait to feel pain before seeing a doctor.

DIAGNOSIS

If you have a symptom or your screening test result suggests cancer, the doctor must find out whether it is due to cancer or to some other cause.

- **Lab Tests**

Tests of the blood, urine, or other fluids can help doctors make a diagnosis. These tests can show how well an organ (such as the kidney) is doing its job. High amounts of some substances may be a sign of cancer. These substances are often called tumour markers. However, abnormal lab results are not a sure sign of cancer.

- **Imaging Procedures**

Imaging procedures create pictures of areas inside the body that help the doctor see whether a tumour is present. These pictures can be made in several ways:

  - X-rays
  - CT scan
  - Radionuclide scan
  - Ultrasound
  - MRI
  - PET scan

- **Biopsy**

For a biopsy, the doctor removes a sample of tissue and sends it to a lab. A pathologist looks at the tissue under a microscope. The sample may be removed in several ways:

  - ***With a needle:*** The doctor uses a needle to withdraw tissue or fluid.
  - ***With an endoscope:*** The doctor uses a thin, lighted tube (an endoscope) to look at areas inside the body. The doctor can remove tissue or cells through the tube.
  - ***With surgery:*** Surgery may be excisional or incisional. In an excisional biopsy, the surgeon removes the entire tumour. Often some of the normal tissue around the tumour is also removed. In an incisional biopsy, the surgeon removes just part of the tumour.

STAGING

To plan the best treatment for cancer, the doctor needs to know the extent (stage) of your disease. For most cancers (such as breast, lung, prostate, or colon cancer), the stage is based on the size of the tumour and whether the cancer has spread to lymph nodes or other parts of the body.

TREATMENT

Your doctor may refer you to a specialist, or you may ask for a referral. Specialists who treat cancer include surgeons, medical oncologists, haematologists, and radiation oncologists. Most treatment plans include surgery, radiation therapy, or chemotherapy. Some involve hormone therapy or biological therapy. In addition, stem cell transplantation may be used so that a patient can receive high doses of chemotherapy or radiation therapy. Some cancers respond best to a single type of treatment. Others may respond best to a combination of treatments.

Some people with cancer use complementary and alternative medicine (CAM) such as Acupuncture, massage therapy, herbal products, vitamins or special diets, juice therapy, ionised water, visualization, meditation, and spiritual healing. Many people say that complementary and alternative medicine helps them feel better. However, some types of CAM may change the way standard treatment works. These changes could be harmful. Other types of CAM could be harmful even if used alone.

Seek a second opinion - Before starting treatment you might want to get a second opinion on diagnosis and treatment plan. This will give you a greater sense of control and confidence as you will have more information on the available options.

Nutrition and physical activity - It is important to eat well and stay active. Walking, yoga, swimming and other activities can keep you strong and increase your energy.

Follow-up care - You will need regular checkups after treatment for cancer. If you have any health problems between checkups, you should contact your doctor.

SOURCES OF SUPPORT

- Doctors, nurses, and other members of your health care team.
- Social workers, counsellors, or members of the clergy
- Support groups
- Cancer Institutions such as the Africa Cancer Foundation and Faraja Cancer Support Trust

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