

WHAT IS CANCER ?

Cancer is a disease in which the cells multiply at an uncontrolled rate, destroy the healthy tissues and endanger the human life.

- ❖ There are more than 200 types of cancer.....
- ❖ Cancer is the second most leading cause of death in most countries of the world after cardiac deaths.
- ❖ Cancer strikes people of all ages but especially middle aged persons and the elderly - 1 in 3 are likely to develop cancer during their lifetime.
- ❖ The most common parts of the body where cancer occurs are the skin, the respiratory organs, the digestive organs, male prostate gland and amongst the females the breast and cervix cancer.
- ❖ 60% of cancers in India occurs in the area of head & neck.

HOW IS CANCER CAUSED ?

Scientists do not know the exact cause of death but yes they have certainly identified on certain agents that cause or initiate cancer. These agents are called the CARCINOGENS.

1. Chemical in the workplace:

Contact with certain harmful substances in the workplace such as asbestos, lead, cadmium etc can cause cancer.

2. Viruses:

Cancer are not infectious and cannot be caught from someone. However, there are a number of different viruses that are thought to be contributing factors in the development of cancer. For examples, exposure to HPV (human papilloma virus) is known to increase a woman's risk of developing cancer of cervix. Other viruses include the Epstein-Barr virus, which is linked to some types of lymphoma. There is also a bacterial infection known as H-pylori which is linked to a rare type of stomach cancer.

3. Genetics:

Only between 5 and 10% of cancers are thought to be caused by an inherited faulty gene from either parent.

It is likely that a 'cancer gene' is present in a family if:

- ❖ There are two or more close blood relatives on the same side of the family with the same type of cancer.
- ❖ Cancers are occurring at young ages (i.e. before the age of 60).
- ❖ If a close relative has had two different types of cancer (not one cancer that has spread).

There are particular types of cancers that are known to run together, for example breast and ovarian or bowel and womb cancer.

4. Other Risk Factors:

- ✚ **Age:** Cancer is relatively rare in young people, but relatively common in old. 65% of cancers (about 2 out of 3 cases) happen to people over 65.

❖ **Smoking:** Smoking is the single biggest cause of cancer that can be avoided. About 30% of cancers (1 in 3 cases) are caused by smoking. It is responsible for around 90% (9 out of 10 cases) of lung cancer, but also plays a role in many other cancers, for example cancer of mouth, throat, bladder, pancreas, bowel, stomach and cervix.

✚ **Chewing tobacco:** It causes Oral Cancer.

❖ **Lack of exercise:** Not doing enough exercise increases the risk of developing bowel and breast cancer.

❖ **Unhealthy weight:** Being overweight or obese increases your cancer risk, particularly for bowel cancer, breast cancer after the menopause and also endometrial (womb) and kidney cancer. If you are overweight, you have different levels of hormones and growth factors in your blood, which seems to increase your cancer risk.

❖ **Unhealthy diet:** There is no single food or diet that can guarantee that you won't get cancer. An overall well-balanced diet reduces cancer risk, in particular the risk of developing bowel cancer.

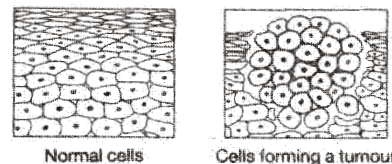
❖ **Exposure to sun:** Sunlight contains radiation (UV rays) which can damage the skin and cause skin cancer. This is particularly the case for fair skinned, blond and ginger haired people.

❖ **High consumption of alcohol:** Drinking more than the recommended amount of alcohol increases your cancer risk. In particular, alcohol plays a role in throat and mouth cancer, but it can also increase risk of bowel and breast cancer.

❖ **Unsafe Sex:** There are some viruses that play a role in the development of some specific cancers. Human papillomavirus (HPV) plays a role in many cases of cervical cancer. Hepatitis B and C can cause liver cancer, and the HIV (AIDS) virus can cause lymphomas and sarcomas (this is rare).

HOW DOES CANCER DEVELOP & SPREAD ?

Cancer develops because of abnormal cell reproduction. The body of an adult human being is made up of hundreds of billions of cells... out of which every single minute of your life several billions of these cells die and are replaced by the new ones. The new cells are produced by division. In this way the dead cells are constantly being replaced by new cells. Normal cells reproduce at exactly the same rate as required to replace the dead cells... never at a faster rate. Cancer cells do not reproduce at controlled rate.



The cells multiply and gradually form a mass of tissue called a "tumour". The tumour could be cancerous (Malignant) or non-cancerous (Benign). A cancerous (malignant) tumour consists of cancer cells which have the ability to spread beyond the original site. If left untreated they may invade and destroy surrounding tissues. Sometimes cells break away from the original (primary)

Cancer and spread to other organs in the body by traveling in the bloodstream or lymphatic system. When these cells reach a new area of the body they may go on dividing and form a new tumour, often referred to as a "secondary" or a "metastasis". This is how cancer spreads.

TYPES OF CANCER

1. Carcinomas:

About 85% of cancers are carcinomas. They start in the epithelium, which is the covering (or lining) of organs and of the body (the skin).

2. Sarcomas:

These form in the connective tissues of the body such as muscle, bone and fatty tissue (6% of cancer)

3. Leukaemias / Lymphomas:

These occur in the tissue where white blood cells (which fight infection in the body) are formed, i.e. the bone marrow, and lymphatic system (5%)

4. Other forms of Cancer:

Brain tumours and other rare forms of cancer make up the other 4% of cancers.

SYMPTOMS

1. A lump anywhere in your body.
2. Changes in a mole on your skins (like bleeding, itching, or change in shape and colour).
3. A cough or hoarseness that won't go away, even after 2 weeks.
4. A change in bowel habits that won't go away, even after 2 weeks.
5. Any abnormal bleeding (from your vagina, your back passage, in your urine or vomiting).
6. Unexplained serious weight loss (5kg or 10lb over a couple of months).
7. A sore that does not heal.
8. Indigestion or difficulty in swallowing.
9. Loss of Appetite.
10. Weakness and tiredness
11. Red or white patches in mouth.
12. Difficulty in opening your mouth.
13. Oral Ulcers that do not heal.

HOW IS IT DIAGNOSED ?

Various tests are used to diagnose cancer like:-

- ❖ Barium meal
- ❖ Barium swallow
- ❖ Biopsy
- ❖ Blood tests
- ❖ Bone marrow
- ❖ Bronchoscopy
- ❖ Colonoscopy
- ❖ CT scan
- ❖ Endoscopy
- ❖ Mammography
- ❖ Mediastinoscopy
- ❖ MRI scan
- ❖ PET scan
- ❖ Pap Smear
- ❖ Radiostope scan
- ❖ Tumour markers
- ❖ Ultrasound
- ❖ X-ray
- ❖ Faecal occult blood
- ❖ FNAC- (Fine needle aspiration cytology)

HOW IS IT TREATED ?

Due to variety of cancers the ideal treatment range from complicated surgery with aggressive therapy to hormonal or biological therapies. Surgery, radiation therapy and chemotherapy can be used in combination or as individual treatments. Successful treatment may lead to remission a condition when signs of disease are gone.

1. Surgery:

Cancer Surgery involves removal of tissue and repair of the affected organs but certain healthy tissues may also have to be removed to stop spreading of disease.

2. Radiotherapy:

Involves attacking cancer tumours with highenergy X-rays or particles from radioactive substance like cobalt 60 and radium. Radiation kills cancer cells but it also kills normal cells. It can cause side effects and the most common is tiredness. The side effect will depend on the part of the body being treated.

3. Chemotherapy:

Chemotherapy is cancer treatment in which drugs are administered to the patient. There are more than 50 drugs used for chemotherapy. It is especially effective in treating leukemia and lymphoma. Chemotherapy can cause side effects. This side effect will depend on which drug is used. There are good ways of preventing side effects.

4. Hormonal Therapy:

Hormonal therapies work by altering the levels of particular hormones in the body. By altering the level of hormones in the body, or blocking the hormones from attaching to the cancer cells the cancer can be controlled.

5. Other treatments

Other treatments can be used to cure or control a cancer cells. They are biological therapies, complimentary therapies, stemcell & bone marrow transplants and supportive therapies.

LIFE AFTER TREATMENT

Once your treatment is completed, you must have regular check-ups and test. These will probably continue for several years. If you have any problems or notice any new symptoms between appointments, let your doctor know as soon as possible.

PREVENTION

Although we don't know how to prevent someone developing cancer we do know that you can reduce risk by making lifestyle choices.

1. Stop smoking.
2. No tobacco in any form (pan or with "chuna")
3. Wear a sun screen (SPF-15)
4. Stop alcohol consumption
5. Have a well balanced diet of portions of fruits & vegetables everyday.
6. Exercise regularly and loose excess weight.
7. Report to your doctor as soon as you suspect anything unusual.
8. Women should have regular breast examination & Pap Smear and Men over 60 P.S.A. tests & health checkups.

- ★ Cancer can be cured.
- ★ Are you worried over your recovery ?
- ★ Are you worried about the financial cost of the treatment ?

With Best Wishes From :-



CANCER AID & RESEARCH FOUNDATION

- ✓ Monetary help to needy cancer patients
- ✓ Free medicines for chemotherapy treatment
- ✓ Accomodation to poor outstation cancer patients
- ✓ Return railway fare to poor outstation cancer patients
- ✓ Spreading awareness of the dangers inherent in prevailing social practices
- ✓ Free ambulance service to all patients
- ✓ Printing literature on cancer etc.
- ✓ Screening of cancer films
- ✓ Free Counselling to cancer patients

Adm. Office

Byculla Municipal School Bldg., Grd. Floor,
R. Nos.- 15-18, N.M. Joshi Marg,
Near ' S ' Bridge, Byculla (West),
Mumbai-400 011.
Tel.: 0091-22- 23005000/7000/8000/23016000

UNDERSTANDING.....

CANCER

Compiled by :

Dr. Asra I. Kazi

Family Physician & Counsellor