Carcinogen

A carcinogen is any substance that can cause cancer. It's important to identify items that might be carcinogenic because we can then take specific measures to avoid or limit our exposure to them. The US Department of Health and Human Services National Toxicology Program, and the World Health Organization's International Agency for Research on Cancer both use evidence-based approaches to catalog substances that are known or reasonably anticipated to be human carcinogens. Both use evidence-based approaches to catalog substances that are known or are reasonably anticipated to be human carcinogens. To date, over 500 substances have been identified as definitive, probable, or possible carcinogens for humans. This includes items like asbestos, automobile exhaust, processed meat, or ultraviolet rays. I should stress that exposure to a carcinogen does not necessarily mean you will get cancer. A number of factors influence whether a person exposed to a carcinogen will ultimately develop cancer, including the amount and duration of the exposure, exposure to other environmental factors, and the individual's genetic background.

Treatment of Cancer

There are many types of cancer treatment.

- 1. Biomarker Testing for Cancer Treatment
- 2. Chemotherapy
- 3. Hormone Therapy
- 4. Immunotherapy
- 5. Radiation Therapy
- 6. Surgery

Palliative Care

Palliative care is a specialty of medicine and nursing that focuses on controlling symptoms, relieving suffering, and providing support for patients with any serious illnesses, including cancer. Palliative care can help patients with any type or stage of cancer. Patients can receive palliative care while also receiving cancer treatments, such as chemotherapy, radiation, or surgery. Patients who receive palliative care often report improved quality of life. Patients who receive palliative care early in their disease course may live longer than if they did not receive palliative care, or received it later in the disease course.Palliative care teams are usually made up of physicians, nurses, social workers, chaplains, pharmacists, and sometimes include physician assistants, nutritionists, as well as physical and occupational therapists. They work in many settings, including hospitals, outpatient clinics, and sometimes in nursing homes or patient homes.

Signs of Cancer

According to the American Cancer Society, seven warning signs of cancer include:

- Changes in bowel or bladder habits: Changes in the color, consistency, size, or shape of stools, or bleeding in the stool
- Lumps: A lump in the breast, scrotum, or elsewhere on the body
- Sores: A sore that doesn't heal
- Bleeding or discharge: Unusual bleeding or discharge, such as bleeding in urine from kidney or bladder cancer
- Coughing: A nagging cough, hoarseness, or sputum with blood
- Difficulty swallowing: Indigestion or difficulty swallowing, which could indicate mouth, throat, oesophagus, or stomach cancer
- Changes in warts or moles: An obvious change in the size or color of a wart or mole.

Early detection of cancer

Prognosis after cancer treatment depends upon final stage of the lesion. Early stage will have excellent 5 years survival. Also the extent of treatment of early disease will be limited and will be associated with minimal deformity and compromise in function. Most of the time single modality treatment is required either surgery or radiation. But question arises how to detect these lesions at early stage.

There are different methods available to detect cancer at early stage. But, most important things are knowledge and awareness about the signs and symptoms of different cancers. This does not apply only to each individual and society but also to the health professionals and paramedics. For example, oral cavity is easily accessible organ. Any white or red patch, ulcer or growth can be easily examined either by patients or their treating physicians, but due to lack of awareness, these patients will be treated by antibiotics or antifungals for long time leading to late presentation. On patient part, even if advised about biopsy of these lesions they refuse and go for alternative methods of treatment as they do not accept the fact that they have cancer and comes back when lesion is incurable. Oral cancer is one of the most common cancer among Indian males due to rampant use of tobacco use, most of these patients present late even if mouth is easily accessible and can be examined very easily. Similarly, any recent onset breast lump should be examined by surgeon and should be investigated by ultrasound, mammogram or cytology/biopsy in case of clinical suspicion.

Habits that leads to cancer

Many habits and lifestyle factors can increase the risk of developing cancer, including:

• Tobacco use: Smoking and using tobacco products are well-established causes of cancer, including lung, oral, pharyngeal, laryngeal, oesophageal, bladder, kidney, and pancreatic cancer.

- Diet: A poor diet can increase the risk of cancer. This includes eating too many processed foods, red meat, fried foods, and barbecued foods, and not eating enough fruits and vegetables. Fruits and vegetables provide fiber, vitamins, minerals, and antioxidants that help fight inflammation and oxidative stress, which are linked to cancer.
- Alcohol use: Drinking too much alcohol can increase the risk of cancer.
- Sun exposure: Sunbathing without sunscreen for long periods of time can increase the risk of cancer.
- Physical inactivity: Being sedentary can increase the risk of cancer.
- Other habits: Other habits that may increase the risk of cancer include:
 - Eating foods with artificial sweeteners peanuts, or preservatives
 - Staying up late
 - Sleeping with a cell phone next to your bed
 - Using cell phones, which emit radiofrequency energy that may lower melatonin levels, which help fight cancerous tumours.

Myths attached to cancer

- A cancer diagnosis means the end of life.
- Cutting out sugar will cure cancer.
- A biopsy or surgery will cause cancer to spread.
- Cancer cures are being withheld.
- Cancer is a modern disease created by humans.
- Smartphones cause cancer.
- Advances in technology mean we should have cured cancer by now.
- Cancer is contagious.
- No family history of cancer means you're not at risk.
- Cosmetics cause cancer.

My efforts on spreading cancer awareness

Attach photos of awareness campaign conducted by you