

## Manual on types of Cancer Screenings

22 August 2018 | Features | By Manbeena Chawla

**There are multiple cancer detection tests that can be used to prevent cancer.**



One of the most important cancer fighting tool is prevention. Screening your body periodically for cancer symptoms is recommended, especially for some people who are at high risk. Getting these tests done regularly may help find cancers such as breast, cervical, lung and colorectal (colon) early, when treatment is likely to work best.

There are multiple cancer detection tests that can be used to prevent cancer. One should not rely on any one test but rather take all clinical factors into consideration to back up a diagnosis.

### **Types of cancer screening tests:**

#### **Prostate Cancer**

Digital rectal exam (DRE) where a doctor inserts a lubricated finger into the rectum to estimate the size of the prostate to feel for lumps or other abnormalities. The Prostate specific antigen (PSA) test helps measure the level of PSA in the blood which is a tumour marker for prostate cancer but can be elevated in infection or inflammation of the prostate also. Hence a patient with high PSA should see a doctor before making a self -diagnosis of a cancer.

#### **Lung Cancer**

The only recommended screening test for lung cancer is low-dose computed tomography (also called a low-dose CT scan, or LDCT). In this test, an X-ray machine scans the body and uses low doses of radiation to take detailed images of the lungs

#### **Breast Cancer**

Breast self-awareness, i.e. checking yourself once a month to see if there is any change and Mammograms (a specialized x-ray of the breast) every year after the age of 40, is the best way to detect breast cancer early, when it is curable.

#### **Liver Cancer**

Alpha-fetoprotein blood test is sometimes used, along with ultrasound of the liver, to try to detect liver cancer early in people

at high risk of the disease. Liver cancer is commonly seen in people who have had Hepatitis B or Hepatitis C or are habituated to alcohol. Vaccination for Hepatitis B can prevent cancer of the liver as can the reduction in alcohol intake.

### **Colorectal Cancer**

Occult blood tested in stool and Colonoscopy/ sigmoidoscopy help prevent colorectal cancer as they can detect abnormal colon growths (polyps) that can be removed before they develop into cancer. A tumour marker, CEA in simple blood test can also help in picking up colon cancer early.

### **Cervical Cancer**

The Pap test can find abnormal cells in the cervix which may turn into cancer. Pap tests also can find cervical cancer early, when the chance of being cured is very high. Besides Pap smear vaccination against human Papilloma virus (HPV) can prevent cervical cancer in 50% of recipients.

### **Ovarian Cancer**

CA-125 blood test, often done together with a transvaginal ultrasound, may be used to try to detect ovarian cancer early, especially in women with an increased risk of the disease.

### **Some laboratory tests for cancer detection:**

**Lymphocyte Size Analysis** test measures the diameters of lymphocytes and counts the numbers of swollen versus normal cells in a sample of a patient's blood. If the number of swollen lymphocytes is excessive or when the ratio of swollen to normal lymphocytes is out of balance, then cancer will most likely develop.

**DR-70** is a highly specific simple blood test that screens for 13 different cancers at the same time.

**Cancer Marker Tests** are immunological methods - cancer markers that are produced as cancer grows and are detectable even before it reaches a size big enough for detection by other methods.

**Biological Terrain Assessment (BTA)** is a computerized device that measures your blood, saliva and urine for the number of electrons present, pH balance, and minerals in these fluids.

**AMAS - Anti-malignin antibody screen test** is designed to pick up cancers well in advance of other signs and symptoms, months before conventional medical tests can detect it.

FDA has approved a test recently where eight cancers can be detected from a person's blood, by placing it on a computer chip and reading the genetic information about that person. The test is under clinical validation studies at present.

**Dr Tejinder Kataria, Chairperson, Radiation Oncology , Cancer Institute, Medanta**