

Lung Cancer

Lung cancer is the uncontrolled growth of abnormal cells that starts in one or both lungs. These abnormal cells do not carry out the functions of normal lung cells and do not develop into healthy lung tissue. With time, the abnormal cells start to form tumors that interfere with the functioning of the lung.

The Burden of Lung Cancer Globally and Locally:

In 2012, a total of 1.8 million new cases of lung cancer and 1.6 million related deaths were reported. This makes lung cancer the most common cause of cancer-related deaths among men and the second most common cause of cancer-related deaths in women after breast cancer. The vast majority (85%) of lung cancer cases are due to long-term smoking, and only 10–15% of lung cancer cases occur in people who have never smoked. These cases were often caused by a combination of genetic factors and exposure to radon gas, asbestos, second-hand smoke, or other forms of air pollution. In Saudi Arabia, lung cancer is the fifth most common cancer among Saudi males, and the 15th most common cancer among Saudi women. In 2013, statistics showed that lung cancer ranked as the seventh most common cancer, both in men and women.

Cause:

Smoking is often the leading cause of lung cancer — both in smokers and in people exposed to secondhand smoke.

Lung cancer can also occur in people who have never smoked.

Types of Lung Cancer:

Doctors divide lung cancer into two major types based on the appearance of lung cancer cells under the microscope. Your doctor makes treatment decisions based on which major type of lung cancer you have.

- **Small cell lung cancer:**

Small cell lung cancer occurs almost exclusively in heavy smokers.

- **Non-small cell lung cancer:**

Non-small cell lung cancer is an umbrella term for several types of lung cancers that behave in a similar way. Non-small cell lung cancers include squamous cell carcinoma, adenocarcinoma and large cell carcinoma.

Symptoms:

Lung cancer typically doesn't cause signs and symptoms in its earliest stages. Signs and symptoms of lung cancer typically occur only when the disease is advanced.

Signs and symptoms of lung cancer may include:

- Persistent coughing
- Coughing up blood
- Shortness of breath
- Chest pain
- Wheezing
- Hoarseness
- Unexplained weight loss
- Bone pain
- Headache

Risk Factors for Lung Cancer Include:

- **Smoking:** the risk of lung cancer increases with the number of cigarettes you smoke each day and the number of years you have

smoked. Quitting at any age can significantly lower the risk of developing lung cancer.

- Exposure to secondhand smoke.
- Exposure to radon gas.
- Exposure to carcinogens: such as: asbestos, arsenic, chromium, and nickel.
- Family history of lung cancer: a parent or a sibling.

Diagnosis:

Lung cancer is diagnosed with the help of:

- X-ray images
- CT scans
- Sputum cytology
- Lung tissue samples (biopsy).

Prevention:

- Quit smoking
- Avoid secondhand smoke
- Test your home for radon
- Avoid carcinogens at work
- Maintain a diet that is rich in fruits and vegetables
- Engage in regular exercise

Treatment:

A treatment plan is chosen based on a number of factors, such as the patients' overall health, the type and stage of cancer, and their personal preferences.

- **Surgery:**

In surgery, the surgeon removes the tissue area that contains a cancerous tumor along with a margin of the surrounding healthy tissue.

Types of surgical procedures:

- Wedge resection: surgical removal of a triangle-shaped slice of tissue to remove the part of the lung that contains cancerous tissue.
- Lobectomy: surgical removal of the entire lobe of one lung to remove cancerous tissue.

Pneumonectomy

- Chemotherapy
- Radiation therapy
- Targeted drug therapy:
 - Afatinib (Gilotrif)
 - Bevacizumab (Avastin)
 - Ceritinib (Zykadia)
 - Crizotinib (Xalkori)
 - Erlotinib (Tarceva)
 - Nivolumab (Opdivo)
 - Ramucirumab (Cyramza)

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For further questions kindly contact us via email:

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