

## **WHAT YOU NEED TO KNOW ABOUT LUNG CANCER.**

Human lungs are two spongy organs located on each side of the heart. These lungs are connected to the outside through Bronchus that transports air from the outside to the lungs. Within the lungs, each bronchus is divided into several smaller bronchioles that each end in a tiny air sac called an alveolus. A network of tiny blood vessels, called capillaries, surround the alveolus. Most lung cancers begin in the epithelial cells lining the bronchus. These cancerous epithelial cells continue to divide out of control and develop into a lump called carcinoma. Lung cancer is the most common cancer among men and the second most common in women of Pakistan. So, how do you know when there is a problem? Well, to know that, you first need to know what causes this cancer.

## **RISK FACTORS FOR LUNG CANCER:**

Factors that influence risk of developing lung cancer include:

1. **Smoking:** It is the leading cause of lung cancer as it causes genetic changes in cells of the lung that ultimately lead to cancer. Exposure to second-hand smoke, Huqa, sheesha and other tobacco-containing products all increase the risk greatly.
2. **Chronic lung disease:** Chronic diseases such as asthma, chronic bronchitis, pneumonia, emphysema and tuberculosis, increases the risk of lung cancer greatly.
3. **Asbestos:** A naturally occurring mineral that is frequently used in construction. Inhalation of particles of this substance can lead to lung cancer.
4. **Personal and family history of cancer:** The more closely related an individual is to someone with lung cancer, the more likely they are to share the genes that increase the risk.

## **SYMPTOMS OF LUNG CANCER**

There are no definite symptoms associated with early stage lung cancer. Symptoms of advanced stage disease can include the following:

1. Persistent cough
2. Sputum streaked with blood
3. Chest pain without apparent cause
4. Voice change
5. Recurrent pneumonia or bronchitis

You must seek urgent medical attention if you have any or all of these symptoms. However, remember that the symptoms are common to many conditions and most men and women with these symptoms do not have cancer.

## **LUNG CANCER DIAGNOSIS AND TREATMENT:**

Lung Cancer is treatable if detected at an early stage. If you have a symptom or a screening test result that suggests lung cancer, your doctor will perform various tests to help in the diagnosis.

1. Medical History
2. Chest x-ray
3. Chest CT scan.
4. Bronchoscopy (Insertion of a camera into the bronchi to examine the lining)
5. Sputum cytology (Examination of cells in the Phlegm)

If you are indeed diagnosed with cancer, be assured that there are many treatment options for those with lung cancer today. These include:

1. **Surgery:** To remove cancer tissue.
2. **Chemotherapy:** To destroy cancer cells using anti-cancer drugs.
3. **Radiation:** To destroy cancer cells using high energy rays.
4. **Biological therapy:** To boost your body's natural immune system against cancer.

There are also many ways these treatments can be combined. So, it is usually good to get a second opinion before starting any therapy. Treatment depends upon many things (e.g., how big the cancer is, how much it has spread, and the patient's age and overall health).

### **EARLY DETECTION AND PREVENTION:**

The following can reduce the risk for lung cancer.

1. DO NOT SMOKE and / or use other tobacco products.
2. Proper management and treatment of any chronic lung diseases you might have.
3. Maintain healthy weight and lifestyle.
4. Eat a diet rich in fruits and vegetables and low in red meat.

Reduce exposure to chemicals involved in increasing risk including asbestos, automotive and industrial pollution.