

## Symptoms of lung cancer

Understanding the symptoms of lung cancer and taking timely action can lead to earlier diagnosis, more effective treatment and improved survival rates

A symptom is a noticeable change in your body which could be caused by an illness. For lung cancer, symptoms are the things a person notices that could suggest there is a problem in their lungs. These symptoms happen because lung cancer can irritate, block, or damage parts of the lung[1]. We will be going through the symptoms of lung cancer in this article. The symptoms of lung cancer are not always obvious in its early stages, making awareness and vigilance crucial. While some individuals may experience common symptoms such as persistent coughing, others might experience noticeable changes in their health. Importantly, not all symptoms are directly related to lung cancer, as they can overlap with other respiratory conditions such as asthma, pneumonia, tuberculosis, etc[2]. Understanding the symptoms and their potential implications can empower individuals to seek timely medical attention.

Many people may not experience any noticeable symptoms until advanced stages of cancer development while some have symptoms similar to common cough and cold or pneumonia. In some cases if the cancer has reached advanced stages and has spread to other parts of the body, symptoms related to those body parts are also experienced. Thus, regular check-ups and screening are crucial for early detection of Lung cancer[3].

Lung cancer is one of the most prominent types of cancer world-wide, it is also a leading cause of global cancer-related deaths. Detecting symptoms at an early stage can improve outcomes, offering patients more treatment options, helping.[4]

Let's explore the different types of symptoms in lung cancer:

### Early symptoms :

Early symptoms of lung cancer are the initial warning signs that may suggest the presence of the disease, often before it has significantly progressed or spread. These symptoms can be subtle and may be mistaken for less serious conditions, making early detection vital for timely diagnosis and treatment.[1]

**Persistent Cough :** A cough that does not go away within a few weeks, unlike common cold or flu, and gets worse overtime can be an early symptom for lung cancer. It may be a dry cough or sputum with blood streaked mucus.[2]

**Shortness of breath :** Unexplained shortness of breath and resultant fatigue is also a major symptom. This occurs due to the tumor blocking airways or fluid accumulation around the lungs[4]

**Chest Pain :** Lung cancer related chest pain is experienced which gets more painful during deep breathing, laughing or coughing.[6]

**Voice changes :** A hoarse or wheezy voice, particularly for more than a couple of weeks might indicate the change in lung functioning.[2]

**Recurrent Respiratory Infection :** frequent bronchitis or pneumonia which does not respond to normal treatments is a prominent symptom[3]

### **Advanced Symptoms of lung cancer :**

Advanced symptoms of lung cancer refer to the signs and complications that arise as the disease progresses and spreads to other parts of the body. These symptoms become more severe and systemic, often indicating that the cancer has reached its later stages. Recognizing these symptoms is crucial, as they typically require immediate medical attention and suggest a more complex treatment approach. With the progress of cancer development, its symptoms become more pronounced

**Fatigue :** lung cancer related fatigue is unexplained tiredness which does not get relieved with temporary rest.It arises from the body's response to the cancer.[6]

**Weight loss :** Unintentional or unexplained weight loss can occur due to the changes in body metabolism and reduced appetite caused due to the cancer. This is often an early systemic indicator of advanced disease.[4]

**Bone pain:** Bone pain commonly in the back and hips which worsens during night or extensive work is also a major symptom.[2]

**Neurological symptoms :** If the lung cancer has reached advanced stages and spread to other parts like the brain or spinal cord,patients might experience headache, seizures, dizziness, or difficulty maintaining balance. These symptoms require immediate medical evaluation.[4]

**Swelling in the Face and Neck :**Superior vena cava syndrome occurs when a tumor compresses the vein that carries blood from the upper body to the heart, leading to swelling of the face, neck, and arms.[5]

**Symptoms by type of lung cancer :**

Lung cancer is crudely categorized into two types as Non small cell lung cancer(NSCLC) and Small cell lung cancer(SCLC)

NSCLC is the most common type of lung cancer.It has slower growth and lesser spread.

SCLC is an aggressive type of lung cancer which grows and spreads rapidly ,prominently found in heavy smokers or individuals who are exposed to carcinogens.

**Symptoms in NSCLC :**

- Persistent, worsening cough and coughing up blood are common.
- Early-stage NSCLC might only cause mild shortness of breath or chest discomfort.[3]

Advanced stages often involve systemic symptoms like fatigue, weight loss, and paraneoplastic syndromes (e.g., hypercalcemia).

## Symptoms in SCLC :

- Symptoms appear abruptly including severe cough, pain and difficulty in breathing.
- Muscle weakness and difficulty in swallowing.[6]

## Uncommon Symptoms :

Uncommon symptoms of lung cancer are those that are observed less frequently but can still occur in certain cases. This variability may be due to the unique behavior of specific tumor types or the body's reaction to the cancer. Although these symptoms are not as prevalent, they can provide critical clues for diagnosis and should prompt further medical evaluation if they arise.

**Clubbing of fingers:** change in shape of fingers and nails due to low oxygen supply due to tumor in lung.[5]

**Hormonal Imbalance :** Certain types of lung cancer produce hormones that disrupt the body's normal functions, causing symptoms such as high blood calcium (hypercalcemia), low sodium (hyponatremia), or Cushing's syndrome.[2]

**Shoulder Pain :** Pancoast tumors, a type of lung cancer that grows at the top of the lungs, may cause severe shoulder pain that radiates to the arms and hands.[6]

If you notice any of these symptoms, it is important to see a doctor right away. In addition to these, the symptoms of lung cancer might vary depending on your sex, age and overall lifestyle and health. Early detection can lead to more effective treatments that are often less invasive. Individuals with a history of smoking, constant exposure to carcinogens (such as asbestos and radon gas), or those suffering from chronic lung diseases have a greater risk of developing lung cancer. Similarly, having a first degree relative with lung cancer increases the risk of cancer development, even in non-smokers, as genetic mutations can also contribute to the onset of lung cancer and thus are advised to go for screening even if they do not experience any symptoms.

There are some screening tests done for detection of lung cancer .Please read the article on 'Screening Tests for Lung Cancer' to know more about them.

References :

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