

## Risk factors for delayed diagnosis of Lung Cancer

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**Aim:** The aim of the study was to define factors related to a delay of lung cancer diagnostics.

**Methods:** Medical reports of 55 patients with lung cancer were analyzed. Clinical presentation, radiological, laboratory data of all patients was collected. Odds ratios (OR) and nominal 95% confidence intervals (CI) were presented.

**Results:** Mean age of patients 58.4±13.8 yrs. Men in the study were 37 (67%). the period from the disease manifestation up to creating a real diagnosis was 90.4±77.3 days, patients delay was 32±38 days. 44% of the patients were previously treated of an assumed pneumonia before hospitalization in TB hospital. All patients have been hospitalized with wrong diagnosis of pulmonary TB, a principal cause-misinterpretation of chest radiogram. 48% of carcinoma patients mistakenly treated for TB for an extended time. Factors related to increase of diagnostic delay were: acute onset of the disease (OR: 0.4, 95% CI: 0.2-0.8), fever (OR: 0.4, 95% CI: 0.2-0.8), absence of symptoms (OR: 0.4, 95% CI: 0.1-0.9), absence of hematological changes (OR: 0.3, 95% CI: 0.1-0.7), nonspecific microbial growth in sputum (OR: 0.1, 95% CI: 0.01-0.7) and detection of acid-fast bacillus (AFB) in sputum (OR: 0.2, 95% CI: 0.06-0.7). Factors related with decrease of diagnostic delay were also found.

**Conclusions:** Before the establishment of a real diagnosis, patients with lung cancer had over diagnosis of tuberculosis and community-acquired pneumonia. It can be said that diagnosis requires histological confirmation.

**Background:** Lung cancer is a sort of cancer that starts within the lungs. Cancer starts when cells within the body begin to grow out of control. The delay in diagnosis of lung cancer worsens prognosis of the disease. Reducing diagnostic delay could reduce mortality. Lung cancer is one among the leading causes of death in the world. The 2 sorts of lung cancer, which grow and spread differently, are small-cell lung cancers (SCLC) and non-small-cell lung cancers (NSCLC). Health professionals also refer to them as small-cell lung carcinoma and non-small-cell lung carcinoma. About 80% to 85% of lung cancers are non-small-cell lung carcinoma. Subtypes of non-small cell lung carcinoma are adenocarcinoma, squamous cell carcinoma, and large cell carcinoma. These subtypes, which start from different types of lung cells are grouped together as NSCLC because their treatment and prognoses are often similar. About 10% to 15 of all lung cancers are SCLC and it's sometimes called oat cell cancer. Signs and symptoms of lung cancer may include: cough that doesn't go away, coughing up blood, even a small amount, shortness of breath, chest pain, hoarseness, losing weight without trying, bone pain, headache.

Along with the other types of lung cancer, other tumors can occur within

the lungs. They are:

Lung carcinoid tumors: Carcinoid tumors of the lung constitute for less than 5% of lung tumors and most of these tumors grow slowly.

Other lung tumors: Other types of lung cancer like adenoid cystic carcinomas, lymphomas, and sarcomas, and benign lung tumors like hamartomas are rare and these are treated differently from the more common lung cancers. Cancers that spread to the lungs: Cancers that start in other organs (such as the breast, pancreas, kidney, or skin) can sometimes spread (metastasize) to the lungs, but these aren't lung cancers. For instance, cancer that starts within the breast and spreads to the lungs remains breast cancer, not lung cancer. Treatment for metastatic cancer to the lungs is predicated on where it started. A number of factors may increase the risk of lung cancer. Some risk factors can be controlled, for instance, by quitting smoking and other factors can't be controlled, such as family history.

### Risk factors for lung cancer include:

**Smoking:** Risk of lung cancer increases with the number of cigarettes a person smokes each day and the number of years they smoked. Quitting at any age can lower the risk of developing lung cancer.

Exposure to secondhand smoke: Even if a person doesn't smoke, the risk of lung cancer increases if he/she is exposed to secondhand smoke.

Previous radiation therapy: If a person has undergone radiation therapy to the chest for another type of cancer, you may have an increased risk of developing lung cancer.

Exposure to radon gas: Radon is produced by the natural breakdown of uranium in soil, rock and water that gradually becomes part of the air we breathe. Unsafe levels of radon can accumulate in any building.

Exposure to asbestos and other carcinogens: Exposure to asbestos and other substances at workplaces is known to cause cancer. Chemicals such as arsenic, chromium and nickel can increase the risk of developing lung cancer.

Family history of lung cancer: Anyone with a parent, sibling or child with lung cancer has an increased risk of the disease.

Lung cancer has common symptoms with other lung diseases including tuberculosis, which leads to misdiagnosis and delayed diagnosis.

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