
SPONTANEOUS EXPECTORATION OF MALIGNANT TISSUES

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Introduction

Lung cancer remain a major and world wide health problem, it is the cause of 12.8 % of cancer cases and 17.8% of cancer death worldwide¹. The diagnosis of lung cancer depend first on the clinical features usually in smoker patients and second on the additional investigations which includes radiology, blood tests, sputum cytology and bronchoscopy with subsequent histopathology of the tissue obtained².

Once signs, symptoms, or screening studies suggest lung cancer, it is necessary to establish a tissue diagnosis of malignancy, to determine the histologic cell type, and to stage the patient for appropriate treatment³.

In some cases the diagnosis remains uncertain when the result of sputum cytological examination is not conclusive and the patient is unfit for (or refuses) bronchoscopy, so tissue is not available for definitive diagnosis.

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We describe a case of lung cancer in an old lady were by tissue specimen where obtained by spontaneous expectoration of pieces of tissues subjected to histopathology and confirm the diagnosis of highly malignant growth.

Case Report

Seventy year old lady presented with history of persistent cough and expectoration of whitish sputum for a long period of time, she also mentioned mild left sided chest pain, anorexia with subsequent weakness and weight loss.

She gave history of heavy cigarette smoking more than 20 cigarette a day over a period of 40 years or more.

She also gave a history of repeated medical consultation and hospital admissions for chronic bronchitis.

Examination reviled an old, thin, ill looking lady, slightly pale with clinical signs of chronic obstructive airway disease with a degree of emphysema.

Blood tests reviled moderate degree of iron deficiency anemia with very high erythrocyte sedimentation rate.

Chest radiography revealed large dense opacity in the mid zone of the left lung, which look radiologically to be highly suggestive of carcinoma of the lung (figure).



The sputum examination for malignant cells was repeatedly negative.

The patient refuses fiberoptic bronchoscopy and there was no available tissue for histologic diagnosis and was discharged on palliative treatment.

The family reported that the patient is expectorating clot like pieces of tissue with the sputum, accordingly the family was provided with a formalin container to collect a piece of the expectorated

material which was subjected to careful histopathological study which prove the diagnosis of undifferentiated bronchogenic carcinoma on two occasions by two different examiners.

Discussion

The diagnosis of lung cancer, and consequently the staging of the individual case and the planing of appropriate treatment depend on the tissue specimen obtained from the patient either by bronchoscopy or via surgical thoracotomy or from scalene or other lymph node enlargement, or through mediastinoscopy, or rarely from lytic bone lesion or bone marrow biopsy⁴.

In the absence of tissue specimen the diagnosis, and the cell type and consequently the staging, of lung cancer remain doubtful and the treatment is only palliative.

In the case presented; the radiological picture was very suggestive of lung cancer but tissue diagnosis was not possible because the sputum cytology was repeatedly negative and the patient refuse bronchoscopy.

The expectoration of pieces of tissue from the main tumor site as seen in this case was rather unique and we could not come across similar case on reviewing the literature of the subject of lung cancer, so for our knowledge this is the first report of spontaneous expectoration of malignant tissue from lung cancer.

References

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