



## Case Report

Journal Homepage: <http://crp.tums.ac.ir>

# Interesting Imaging in a Patient With Lung Cancer Due to Asbestosis

Anahita Bolbol Haghighi , Sahar Karimpour Reyhan\* *Department of Internal Medicine, Imam Khomeini Hospital Complex, Tehran University of Medical Sciences, Tehran, Iran.*

Use your device to scan and read the article online

**Citation:** Bolbol Haghighi A, Karim Pour Reyhan S. Interesting Imaging in a Patient With Lung Cancer Due to Asbestosis. Case Reports in Clinical Practice. 2020; 5(1):17-18.**Running Title:** Interesting Imaging in a Patient With Lung Cancer**Article info:****Received:** 19 January 2020**Revised:** 06 February 2020**Accepted:** 12 March 2020**Keywords:**

Asbestosis; Chest computerized tomography scan (CT scan); Lung cancer

**ABSTRACT****Introduction:** Asbestosis is a subtype of pneumoconiosis caused by asbestos that can lead to fibrosis and scarring the lung tissues.**Case Report:** Some of the asbestos-related diseases are calcifications, malignant mesothelioma, and pleural effusion.**Conclusion:** Asbestosis can cause cancer several years after the initial exposure, but it can remain asymptomatic for a long time. Here we present image of a patient with asbestosis related carcinoma.

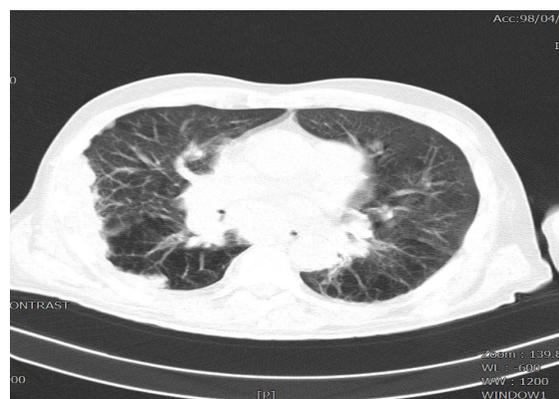
**A**sbestos refers to naturally-occurring silicate minerals in industries such as auto mechanics, construction, insulation, and mining. Asbestosis is a subtype of pneumoconiosis caused by asbestos and can lead to fibrosis and scarring the lung tissues. It usually occurs in patients with occupational exposure to asbes-

tos fibers [1]. Some of the asbestos-related diseases are calcifications, malignant mesothelioma, and pleural effusion. Asbestosis can cause cancer several years after the initial exposure, but it can remain asymptomatic for a long time. Smoking can increase disease complications and, specifically, increase the chance of malignancies [2].

**\* Corresponding Author:****Sahar Karimpour Reyhan, MD.****Address:** Department of Internal Medicine, Imam Khomeini Hospital Complex, Tehran University of Medical Sciences, Tehran, Iran.**E-mail:** [skarimpour@sina.tums.ac.ir](mailto:skarimpour@sina.tums.ac.ir)



**Figure 1.** Mediastinal view of the patient's chest CT scan



**Figure 2.** Parenchymal view of the patient's chest CT scan

The **Figures 1 and 2** show interesting cuts of the chest CT scan of a patient admitted to the hospital with asbestosis-related carcinoma. He was a 58-year-old smoker male with dyspnea and cough and history of working in an insulation factory as an electrical engineer for about 20 years. The biopsy of a pleural mass had suggested poorly differentiated adenoid carcinoma with lung origin. In the images below, increased nodular thickness and mass-like pleura can be seen in the right hemithorax. There are several confluent mediastinal lymphadenopathies. Also, diffused bilateral emphysema with subsegmental atelectasis and bilateral consolidations were detected in the lower lobes of the lungs.

## Ethical Considerations

### Compliance with ethical guidelines

All of the authors conduct themselves following professional ethics.

### Funding

This work was supported in part by the research center of Imam Khomeini Hospital Complex.

### Conflict of interest

The authors declared no conflict of interest.

### Acknowledgements

We acknowledge all Hospital Staff who served the patients.

## References

- [1] Phelka AD, Finley BL. Potential health hazards associated with exposures to asbestos-containing drywall accessory products: A state-of-the-science assessment. *Critical Reviews in Toxicology*. 2012; 42(1):1-27. [DOI:10.3109/10408444.2011.613067] [PMID]
- [2] Constanza Camargo M, Stayner LT, Straif K, Reina M, Al-Alem U, Demers PA, et al. Occupational exposure to asbestos and ovarian cancer: A meta-analysis. *Environmental Health Perspectives*. 2011; 119(9):1211-7. [DOI:10.1289/ehp.1003283] [PMID] [PMCID]