

**Case Report** 

Journal Homepage: http://crcp.tums.ac.ir

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

Anahita Bolbol Haghighi<sup>1</sup> , Sahar Karim Pour Reyhan<sup>1\*</sup>

1. Department of Internal Medicine, Imam Khomeini Hospital Complex, Tehran University of Medical Sciences, Tehran, Iran.



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 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.



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 octos 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].

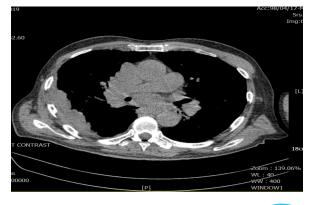
curs in patients with occupational exposure to asbes-

\* 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





CRCP

Figure 1. Mediastinal 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 lymphade-nopathies. 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.



CRCP

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

#### References

- 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]