

Incidental Pulmonary Nodules and Lung Cancer Screening

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ABSTRACT

Incidental nodules and lung cancer screening nodules are causes of concern and anxiety for the patients. Both these require diligent follow up according to their respective guidelines.

INCIDENTAL PULMONARY NODULES

Incidental pulmonary nodules can cause a lot of uncertainty for clinicians and anxiety for patients given that lung cancer is the leading cause of cancer mortality in the United States. Management includes detailed and thorough evaluation of nodule size and radiological features paired with individualized clinical risk factors and comorbidities. In 2017, the Fleischner Society issued revised guidelines for the management of solid and subsolid nodules. Clinical prediction

models assess the likelihood of malignancy in pulmonary nodules detected by computed tomography based on clinical data and radiological characteristics of the nodule.

In this video, which is a part of the pulmonary nodule curriculum for pulmonary and critical care medicine fellows at the University of Maryland Medical Center, we review the Fleischner Society guidelines, the use of clinical prediction models (Mayo Clinic), and the most common next steps of management in similarly encountered cases.

(Received in original form June 6, 2022; accepted in final form January 31, 2023)

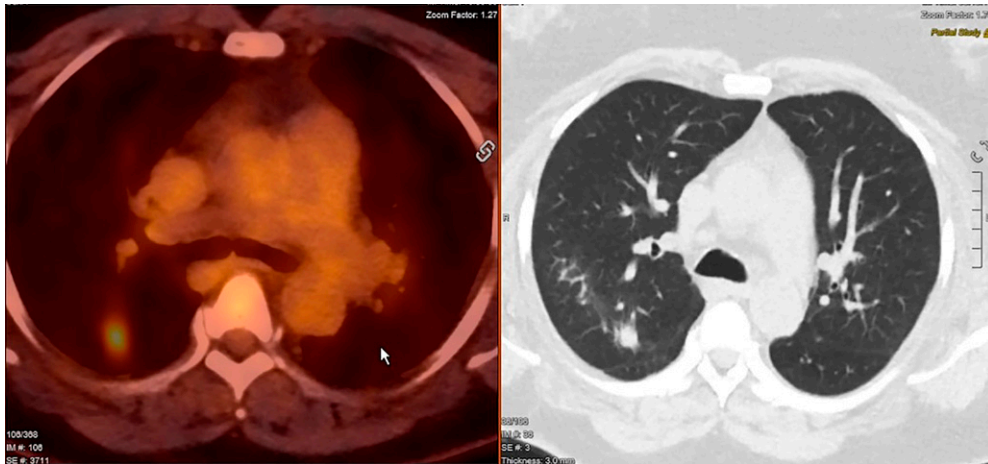
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Supported by National Institutes of Health, Laboratory of Human Carcinogenesis, National Cancer Institute (NCI)-Center for Cancer Research grant NCI-NO2RC-57700 (J.D.).

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The videos can be viewed in the online version of this article.

ATS Scholar Vol 4, Iss 2, pp 243–245, 2023
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DOI: 10.34197/ats-scholar.2022-0055VO

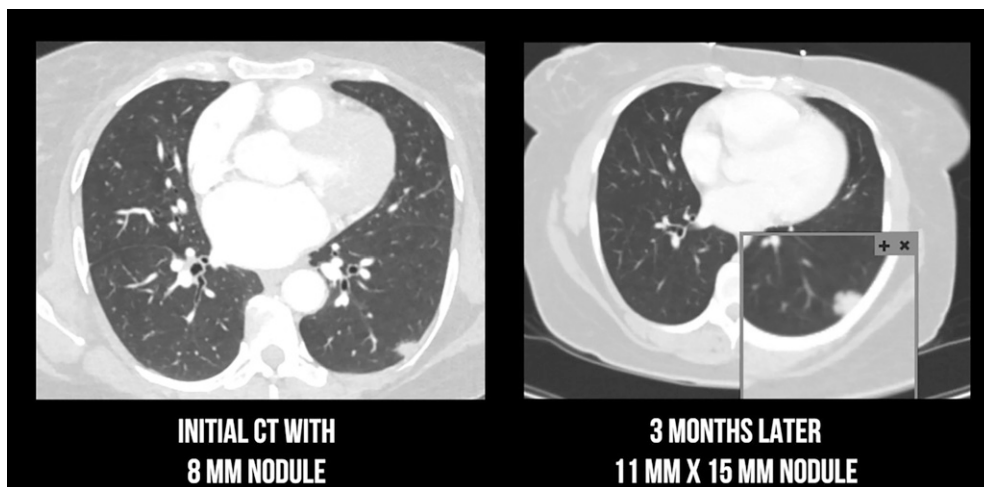


Video 1. PET (Positron Emission Tomography) scan (left) and CT (Computed Tomography) scan (right) comparison showing FDG (Fluorodeoxyglucose) uptake in the pulmonary nodule seen in the posterior segment of right upper lobe. Video 1: Educational video depicting a physician - patient interaction in the management of incidental pulmonary nodules and shedding light on clinical prediction models to assess the risk of lung cancer.

LUNG CANCER SCREENING

Lung cancer is one of the leading causes of cancer-related mortality globally. In fact, lung cancer is the most common cause of cancer death in men and the second most common cause of cancer death in women worldwide. Early detection has been paramount in improving survival of patients with lung cancer. The advent of

lung cancer screening with the use of low-dose computed tomography scans has improved mortality. Therefore, primary care providers as well as pulmonary specialists should be well acquainted with the guidance provided by the U.S. Preventive Services Task Force for lung cancer screening. This video is intended to review important topics related to lung



Video 2. The initial (left) and three-month follow-up (right) CT scan showing increase in size of the pulmonary nodule from 8 mm to 11 mm \times 15 mm. Video 2: Educational video focusing on the new USPSTF (United States Preventive Services Task Force) recommendation for lung cancer screening, management of nodules identified by low dose chest computed tomography, and the use of lung nodule risk assessment models.

cancer screening as well as management of solitary pulmonary nodules identified via screening. The primary objectives of this video are: 1) to provide the audience with a brief review of the updated U.S. Preventive Services Task Force guidelines on lung cancer screening issued March 9, 2021; 2) teach tools required to manage nodules identified by lung

cancer screening, i.e., Lung-Rads; and 3) promote understanding of the utility of lung cancer risk assessment models such as the Brock and Herder model in the management of solitary pulmonary nodules.

Author disclosures are available with the text of this article at www.atsjournals.org.

RECOMMENDED READINGS

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