

The Top 10 Pulmonary Pearls for Primary Care Physicians



Eric J. Kwoh, MD; Casey Y. Kaneshiro, MD; Neil M. Paige, MD;
and Jaime Betancourt, MD

CME Activity

Target Audience: The target audience for *Mayo Clinic Proceedings* is primarily internal medicine physicians and other clinicians who wish to advance their current knowledge of clinical medicine and who wish to stay abreast of advances in medical research.

Statement of Need: General internists and primary care physicians must maintain an extensive knowledge base on a wide variety of topics covering all body systems as well as common and uncommon disorders. *Mayo Clinic Proceedings* aims to leverage the expertise of its authors to help physicians understand best practices in diagnosis and management of conditions encountered in the clinical setting.

Accreditation: In support of improving patient care, Mayo Clinic College of Medicine and Science is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.



Credit Statement: Mayo Clinic College of Medicine and Science designates this journal-based CME activity for a maximum of 1.0 AMA PRA Category 1 Credit(s).[™] Physicians should claim only the credit commensurate with the extent of their participation in the activity.

MOC Credit Statement: Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 1 MOC point in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

Learning Objectives: On completion of this article, you should be able to (1) recognize early signs and symptoms of chronic obstructive pulmonary disease, (2) utilize current guidelines in the management of pulmonary nodules, and (3) identify patients who would benefit from pulmonary rehabilitation.

Disclosures: As a provider accredited by ACCME, Mayo Clinic College of Medicine and Science (Mayo School of Continuous Professional Development) must ensure balance, independence, objectivity, and scientific rigor in its educational activities. Course Director(s), Planning Committee members, Faculty, and all others who are in a position to control the content of this educational activity are required to disclose all relevant financial relationships with any commercial interest related to the subject matter of the educational activity. Safeguards against commercial bias have been put in place. Faculty also will disclose any off-label and/or investigational use of pharmaceuticals or instruments discussed in their presentation. Disclosure of this information will be published in course materials so that those participants in the activity may formulate their own judgments regarding the presentation.

In their editorial and administrative roles, Karl A. Nath, MBChB, Terry L. Jopke, Kimberly D. Sankey, and Jenna M. Pederson, have control of the content of this program but have no relevant financial relationship(s) with industry.

Dr Betancourt is on the speakers bureau for Boehringer-Ingelheim Pharmaceuticals.

Method of Participation: In order to claim credit, participants must complete the following:

1. Read the activity.
2. Complete the online CME Test and Evaluation. Participants must achieve a score of 80% on the CME Test. One retake is allowed.

Visit www.mayoclinicproceedings.org, select CME, and then select CME articles to locate this article online to access the online process. On successful completion of the online test and evaluation, you can instantly download and print your certificate of credit.

Estimated Time: The estimated time to complete each article is approximately 1 hour.

Hardware/Software: PC or MAC with Internet access.

Date of Release: 8/1/2018

Expiration Date: 7/31/2020 (Credit can no longer be offered after it has passed the expiration date.)

Privacy Policy: <http://www.mayoclinic.org/global/privacy.html>

Questions? Contact dletcsupport@mayo.edu.

From the Division of Hospital Medicine (E.J.K., C.Y.K.), Division of General Internal Medicine (N.M.P.), and Division of Pulmonary Medicine (J.B.), Veterans Affairs (VA) Greater Los Angeles Healthcare System, David Geffen School of Medicine at University of California, Los Angeles (UCLA), Los Angeles, CA.

Abstract

Pulmonary diseases are commonly encountered by primary care physicians in the outpatient setting. Despite their prevalence, many physicians may be unfamiliar with the diagnosis and appropriate management of these disorders. The evidence-based pearls in this article will help primary care physicians navigate important topics in pulmonary medicine and guide their decision to refer their patients to a pulmonary specialist.

© 2018 Mayo Foundation for Medical Education and Research ■ Mayo Clin Proc. 2018;93(8):1131-1138

TOP 10 PULMONARY PEARLS FOR PRIMARY CARE PHYSICIANS

1. Solid Pulmonary Nodules Smaller Than 6 mm Found Incidentally on Computed Tomography Do Not Require Follow-up Imaging in Low-Risk Patients. Optional Follow-up Imaging Can Be Considered in High-Risk Patients

Primary care physicians encounter pulmonary nodules incidentally on computed tomography (CT) at an increasing rate, without a concomitant increase in the diagnosis of lung cancer.¹ This issue challenges the primary care physician to identify which nodules may represent early lung cancer and therefore need follow-up imaging. The updated 2017 Fleischner Society guidelines²

recommend that for patients with solid noncalcified nodules smaller than 6 mm, routine follow-up CT is not indicated in low-risk adults older than age 35 years. “Low risk” corresponds to an estimated risk of cancer of less than 5% as proposed by the American College of Chest Physicians (ACCP) and is associated with young age, less smoking, smaller nodule size, regular margins, and location in an area other than the upper lobe; additionally, these guidelines define “high risk” as including both the ACCP intermediate-risk (5%-65% risk of cancer) and high-risk (>65% risk of cancer) categories, which are associated with older age, heavy smoking, larger nodule size, irregular or spiculated margins, and upper lobe location.³ The same recommendations apply even if multiple solid pulmonary nodules smaller than 6 mm are present. Note that these new guidelines are less intensive than prior guidelines, as the threshold for follow-up imaging has increased (from 4 mm previously), thereby eliminating many unnecessary CT scans. This guideline change is based on supporting evidence from screening trials that indicate that the risk of cancer in solid nodules smaller than 6 mm is less than 1%, even in patients considered at high risk.⁴ A CT scan at 12 months can be considered optional for nodules smaller than 6 mm in high-risk patients and may be considered more seriously in those with suspicious nodule morphology (eg, spiculated margins) or upper lobe location. For solid nodules that are 6 to 8 mm, follow-up CT is recommended in all cases; the timing and frequency is dependent on the size, type, and number of nodules. For solid nodules larger than 8 mm, consider 3-month follow-up imaging, work-up with combined positron emission tomography and CT, tissue sampling, or a combination of these methods; any of these options may be appropriate, and a pulmonary specialist can assist with decision making. Importantly, these specific guidelines pertain to pulmonary nodules found incidentally on CT; separate recommendations (Lung-RADS [Lung Imaging Reporting and Data System]) proposed by the American College of Radiology exist for nodules found on annual low-dose CT screening for lung cancer.⁵ Lastly, updated recommendations for subsolid and ground-glass nodules are also provided by the 2017 Fleischner Society guidelines.

2. In Patients With Acute Chronic Obstructive Pulmonary Disease Exacerbation, a 5-Day Course of Prednisone Is as Effective as a 14-Day Course

Most chronic obstructive pulmonary disease (COPD) exacerbations (up to 80%) are managed in the outpatient setting.⁶ The use of systemic glucocorticoids in COPD exacerbations shortens recovery time, improves lung function and oxygenation, and decreases the risk of early relapse.⁷ However, glucocorticoids are also well known to have many adverse effects, and long-term use is an independent risk factor for increased mortality in COPD.⁸ The optimal duration of systemic glucocorticoid treatment for COPD exacerbation was not well defined until the results of the REDUCE (Reduction in the Use of Corticosteroids in Exacerbated COPD) trial⁹ were published in 2013. Prior guidelines had generally recommended a 7- to 14-day course of systemic glucocorticoid therapy for COPD exacerbations. The REDUCE trial found that in patients presenting to the emergency department with acute COPD exacerbations, a 5-day treatment course with prednisone, 40 mg daily, was noninferior to a 14-day treatment course with respect to re-exacerbation rates. These results can be extrapolated to the outpatient setting because the benefit of oral glucocorticoids in the outpatient management of COPD exacerbations has been well established.¹⁰

3. Pulmonary Rehabilitation Is a Standard of Care for All Patients With Symptomatic Chronic Lung Disease

Every patient with chronic lung disease who is symptomatic or has a decreased quality of life should be strongly considered for pulmonary rehabilitation. The American College of Physicians, ACCP, and American Thoracic Society recommend that clinicians prescribe pulmonary rehabilitation for symptomatic patients with a forced expiratory volume in the first second of expiration (FEV₁) of less than 50% predicted and should consider it for symptomatic patients with an FEV₁ of greater than 50% predicted.¹¹ There is now a wealth of evidence that pulmonary rehabilitation yields reduction in dyspnea and hospital readmissions, increase in exercise performance, and improvement in

Download English Version:

<https://daneshyari.com/en/article/8673163>

Download Persian Version:

<https://daneshyari.com/article/8673163>

[Daneshyari.com](https://daneshyari.com)