

BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

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The following succinct analysis appeared in *Pharmacist's Letter*. Based on vol. 33, No. 12

COPD

New evidence will spark controversy over how to treat COPD patients with MILD disease.

About seven in 10 COPD patients have early disease with minimal symptoms. But meds are usually studied in moderate to severe COPD.

Now evidence suggests that *Spiriva* (tiotropium), a long-acting muscarinic antagonist (LAMA), may be beneficial for mild COPD.

It seems to improve lung function and avoid one exacerbation requiring antibiotics or oral steroids in about 10 patients over 2 years.

But it doesn't reduce COPD hospitalizations in these patients...and LAMA inhalers cost at least \$320/month.

Continue to emphasize smoking cessation to slow COPD progression...and ensure patients are up to date with flu and pneumococcal vaccines.

Advise starting with a short-acting bronchodilator as needed for mild, occasional COPD symptoms. Suggest albuterol...or levalbuterol. Both now cost about \$50/inhaler...versus \$330 for *Atrovent* (ipratropium).

Point out that short-acting bronchodilators haven't been shown to reduce exacerbations...even if they're given as a combo or scheduled QID. Plus *Combivent* (albuterol/ipratropium) costs about \$345/inhaler.

Instead, suggest adding a LAMA to a PRN short-acting beta-agonist in patients with mild, persistent symptoms...more than one exacerbation per year...or any exacerbation that requires an ED visit or hospital stay.

Explain *Spiriva* has the most evidence for mild COPD. But if patients or payers prefer, it's okay to use another LAMA...*Incruse* (umeclidinium), *Seebri* (glycopyrrolate), or *Tudorza* (aclidinium).

Generally recommend saving long-acting beta-agonist inhalers (*Serevent*, *Anoro*, etc) for moderate to severe COPD. These haven't been studied in mild COPD...and all cost at least \$200/month.

Suggest avoiding inhaled steroids for mild or moderate COPD...unless patients also have asthma. Steroids are linked to thrush, pneumonia, etc.

Listen to *PL Voices* to hear our team and an expert discuss therapy for mild COPD. And see our toolbox, *Improving COPD Care*, for help with adjusting meds, managing exacerbations, educating patients, and more.

(For more on this topic, see Clinical Resource #331204 at PharmacistsLetter.com.)

Primary Reference – Zhou Y, Zhong NS, Li X, et al. Tiotropium in early-stage chronic obstructive pulmonary disease. *N Engl J Med* 2017;377:923-35.

See LEADER NOTES for answers to discussion questions.

DISCUSSION QUESTIONS

OVERVIEW OF CURRENT THERAPY

1. What is known about treating early-stage chronic obstructive pulmonary disease (COPD)?

ANALYSIS OF NEW STUDY

2. What type of study was this? How were the patients selected for inclusion?

3. How were the study groups defined?

4. How were the outcomes evaluated?

5. What were the outcomes of this trial?

See [LEADER NOTES](#) for answers to discussion questions.

6. What were the strengths and weaknesses of this study?

7. Were the results expressed in terms we care about and can use?

HOW SHOULD THE NEW FINDINGS CHANGE CURRENT THERAPY?

8. Do the results change your practice? How?

APPLY THE NEW FINDINGS TO THE FOLLOWING CASE

S.G. is a 57-year-old male with a 45 pack-year smoking history, currently smoking 1.5 packs per day. He presents to your office with non-productive cough that began about a year ago and worsening shortness of breath over the last several months. He explains that he regularly plays golf with his friends and is having trouble keeping up with them, and often needs to stop to catch his breath. His review of systems is otherwise negative, although he does feel like he wheezes some whenever he gets a cold. You suspect that S.G. has COPD based on his smoking history and symptoms.

9. What are your next steps for S.G.? How is COPD diagnosed and classified?

You order spirometry for S.G., and the results confirm a diagnosis of COPD. Based on his symptoms, history of no exacerbations, and postbronchodilator FEV1 82% of predicted, S.G.'s COPD is classified as 1B disease, consistent with mild COPD.

See [LEADER NOTES](#) for answers to discussion questions.

10. What should you consider for initial management of S.G.'s COPD? What health maintenance items does S.G. need?

You discuss the importance of smoking cessation, since it can reduce the rate of lung function decline. S.G. is willing to try to cut back on smoking, but is not sure about quitting altogether and does not want a medication for smoking cessation at this time. You also advise appropriate vaccines, and prescribe an albuterol inhaler for S.G. to use as needed.

S.G. returns a month later for follow-up. He reports that he has cut down his smoking to ½ pack per day, but also reports increased sputum production over the past week. He describes his phlegm as clear and denies any fever, chills, or worsening dyspnea. Your physical exam is unchanged from prior visits. S.G. wonders if he needs a course of antibiotics to treat a possible infection or pneumonia.

11. How do you counsel S.G.? When might an antibiotic be considered for patients with worsening COPD symptoms?

You discuss that an antibiotic isn't necessary at this time, and advise S.G. to return to clinic if his dyspnea increases or sputum becomes purulent.

S.G. returns six months later with the complaint that he has been using his albuterol more frequently, and is now using it three to four times a day.

12. Should you consider modifying S.G.'s treatment at this time?

You discuss the results of recent data and suggest adding Spiriva or another LAMA inhaler to possibly improve S.G.'s lung function and lower his risk of an exacerbation.

See [LEADER NOTES](#) for answers to discussion questions.

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Additional Pharmacist's Letter Resources available at PharmacistsLetter.com

Chart, Flu Vaccines for 2017-2018. *Pharmacist's Letter/Prescriber's Letter*. October 2017.

PL Voices, Selecting Appropriate Inhaled Medications for COPD. *Pharmacist's Letter/Prescriber's Letter*. February 2017.

Toolbox, Improving COPD Care. *Pharmacist's Letter/Prescriber's Letter*. January 2017.

Toolbox, Smoking Cessation: Helping Patients Who Use Tobacco. *Pharmacist's Letter/Prescriber's Letter*. January 2017.

Chart, Correct Use of Inhalers. *Pharmacist's Letter/Prescriber's Letter*. January 2017.

Patient Education Handout, Tips for Correct Use of Inhalers. *Pharmacist's Letter/Prescriber's Letter*. January 2017.

Chart, Smoking Cessation Drug Therapy. *Pharmacist's Letter/Prescriber's Letter*. June 2016.

Chart, Inhalers for COPD. *Pharmacist's Letter/Prescriber's Letter*. February 2016.

Chart, Pneumococcal Vaccination in Adults: Who Gets What and When? *Pharmacist's Letter/Prescriber's Letter*. November 2015.

Patient Education Handout, How to Kick the Smoking Habit. *Pharmacist's Letter/Prescriber's Letter*. September 2014.

Chart, Choosing a Spacer Device. *Pharmacist's Letter/Prescriber's Letter*. May 2014.

See LEADER NOTES for answers to discussion questions.

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