PE CHECKLIST

COPD revisited

New guidelines mean more patients will be treated

by Denis O'Donnell, MD

Family physicians face important new responsibilities to diagnose and treat patients with chronic obstructive pulmonary disease (COPD), a disease that has traditionally been underdiagnosed and undertreated.

Recent epidemiological studies are showing that COPD is twice as prevalent in Canada as we thought and that morbidity and mortality from the disease is increasing. In fact it's the only major disease where mortality is going up (rates for the other big three—cancer, stroke and heart disease are falling).

Experts worldwide have now reached a consensus on the classification of mild, moderate, severe and very severe COPD. The Canadian Thoracic Society, Canadian Lung Association and Canadian COPD Alliance have published new guidelines to help family physicians identify and treat patients according to the latest protocols. Implementing these recommendations will improve quality of life for many patients, delay disease progression and increase survival times.

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Three key messages for FPs

- **Use targeted screening spirometry to establish diagnosis** then initiate prompt management (including smoking cessation) of mild COPD.
- **Improve dyspnea and exercise tolerance** especially in stable COPD. Use the new evidence-based treatment algorithms.
- **Prevent and manage acute exacerbations** especially in moderate to severe disease.

Diagnosing earlier: who should be screened?

Remember that many symptoms are pre-clinical and patients have habituated to them over time. So symptomatic smokers, or former smokers over 40 should be offered spirometry if they answer yes to any of the following questions:

- Do you cough regularly?
- Do you cough up phlegm regularly?
- Do even simple chores make you short of breath?
- Do you wheeze when you exert yourself or at night?
- Do you get frequent colds that persist longer than those of other people?

Points to remember

- Spirometry is not just for diagnosing COPD, it also helps you assess disease severity.
- Early diagnosis, when treated and coupled with successful smoking cessation interventions, delays disease progression and reduces flare-ups.
- COPD is treatable at any stage. A management strategy consisting of pharmacotherapy and pulmonary rehabilitation interventions can improve outcomes and quality of life at all levels of disease severity.

For a step-by-step guide on treating patients at all stages of COPD, consult the 2008 Primary Care Update on managing COPD, published by the Canadian Thoracic Society, at ***www.copdguidelines.ca****.*

Treat patients according to disease severity

Relieve symptoms and increase activity levels

- Patients diagnosed with COPD by spirometry should be treated based on symptom (dyspnea) severity using the Medical Research Council (MRC) scale.

  The new Canadian classification shifts what qualifies as mild and moderate/severe to recognize that even symptomatic (MRC rating > 3) patients with small changes in spirometry can have significant small airways dysfunction, lung hyperinflation and activity limitation. Such patients deserve a trial of inhaled bronchodilators. If activity-related dyspnea persists despite use of a short-acting bronchodilator (more than twice daily), consider a trial of a long-acting bronchodilator.
- Pharmacological treatment, especially with combined long-acting bronchodilators (LABDs) and with exercise training in pulmonary rehabilitation programs are the most effective in improving symptoms of dyspnea, exercise tolerance and overall health status in patients with moderate to severe airway obstruction and persistent dyspnea.
- Avoid monotherapy with inhaled corticosteroids. In patients with moderate to severe airway obstruction who remain dyspneic despite receiving two long-acting bronchodilators (ie. anti-cholinergic and beta 2 agonist), consider replacing the long-acting beta agonist with combination of lower dose inhaled corticosteroid/long-acting beta agonist.

Exacerbations

- Acute exacerbations are characterized by a sustained worsening of dyspnea, cough or sputum production leading to an increase in the use of maintenance medications and/or supplementation with additional medications for ~48 hours.
- Exacerbations, or flare-ups, also known as “lung attacks,” often result in visits to the local emergency department, hospitalization and, in severe cases, death.
- COPD patients hospitalized with exacerbations have comparable mortality rates to patients admitted with acute myocardial infarctions.

Causes of exacerbations

- Infections — bacterial and viral
- Exposure to allergens and irritants
- Other noninfectious factors

Manage exacerbations aggressively

- It’s critical to prevent and aggressively manage acute exacerbations, particularly in moderate-to-severe disease.
- Physicians need to be proactive to prevent the first exacerbation and all subsequent flare-ups.

How to prevent exacerbations

- All patients should receive influenza vaccination annually.
- All patients should receive the pneumococcal vaccine every 5-10 years.
- All patients should receive structured education and a self-management plan focusing on the prompt recognition and treatment of exacerbations.
- In patients with moderate-to-severe COPD (averaging one exacerbation per year over two years), prescribe “triple therapy” (i.e. a long-acting anticholinergic and higher dose combination inhaled corticosteroid/long-acting beta agonist).
- Purulent exacerbations in patients with more advanced COPD should be treated with a combination of a short course of oral steroids and a suitable antibiotic.