Summary of Recommended Guideline

Stable COPD: Treatment

Key Highlights from the recommended guideline:

- Use a stepped approach determined by severity of COPD symptoms when initiating drug therapy for stable COPD.
- Vaccinate all COPD patients against influenza and pneumococcus.
- Develop an education and exercise plan suited to the patient’s needs

Scope: All clinicians who triage, evaluate and treat patients with COPD or smokers.

How should I approach drug therapy in COPD?

Use a stepped approach to pharmacologic therapy, adding medications if symptoms persist.

- Step 1: Use PRN inhaled short acting bronchodilator (Salbutamol) as first line treatment, 2-4 puffs up to every 4-6 hours. [Level of Evidence: class A, M]
- Step 2: Add scheduled dosing of any of the following [Level of Evidence: class A, R]
  - Tiotropium one capsule inhaled daily *(preferred by guideline)
  - Salmeterol 1 puff twice daily
  - Formoterol 1 puff twice daily
  - Salbutamol 2-4 puffs 4 times a day
  - Ipratropium 2-4 puffs 4 times a day or
  - Salbutamol + Ipratropium 2-4 puffs 4 times a day
- Step 3: Consider a steroid trial. Use oral prednisone in doses of 30-60 mg for 10-14 days or inhaled steroids at <2000 mcgm for 6-8 wks [Level of Evidence: class A, R]
- Step 4: Prescribe inhaled steroids if the patient experienced >15% improvement in FEV1 or symptoms, as this may reduce exacerbation rates. [Level of Evidence: ABM]
- In severe COPD also consider a trial of theophylline [Level of Evidence: class D, R]
- In stable COPD, other pharmacologic agents such as routine antibiotics, antiviral agents, leukotriene modifiers, mucolitics and oral beta-agonists are currently not recommended [Level of Evidence: class A, C, R]
- Vaccinate all COPD patients against pneumococcus and influenza. [Level of Evidence class: R]
What non-pharmacologic treatments are effective?

- Develop an education plan tailored to the patient, which includes knowledge about COPD, skills at recognizing symptoms and managing medications, counseling regarding attitude towards risk factors, and fostering partnerships with health care providers. Encourage exercise. [Level of Evidence: class A, C, D, M, R, X]

- Enter COPD patients into pulmonary rehabilitation programs to improve exercise capacity, QOL, and perception of symptoms. [Level of Evidence: class A, C, M, R]

- Consider referral to a pulmonary specialist at any stage [Level of evidence: not stated]

- For patients with severe symptoms, despite maximal medical therapy, refer the patient for consideration of lung volume reduction surgery or transplantation. [Level of Evidence: class A, C, D, R]

- Discuss advance directives and goals of care as early as possible. [Level of Evidence: class D, R]

What targets should I aim for to track and improve my care of these patients?

- Increased % of moderate to severe COPD patients who have been prescribed regular use of a scheduled bronchodilator.

- Increased % of moderate to severe COPD patients who have been referred to pulmonary rehab

Levels of Evidence

I. CLASSES OF RESEARCH REPORTS

A. Primary Reports of New Data Collection:

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td>Randomized, controlled trial</td>
</tr>
<tr>
<td>Class B</td>
<td>Cohort study</td>
</tr>
</tbody>
</table>
| Class C | Non-randomized trial with concurrent or historical controls  
Case-control study  
Study of sensitivity and specificity of a diagnostic test  
Population-based descriptive study |
| Class D | Cross-sectional study  
Case series  
Case report |

B. Reports that Synthesize or Reflect upon Collections of Primary Reports:

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
</table>
| Class M | Meta-analysis  
Systematic review  
Decision analysis  
Cost-effectiveness analysis |
| Class R | Consensus statement  
Consensus report  
Narrative review |
| Class X | Medical opinion |
The above recommendations were derived from the following GAC endorsed guideline:

Rating (out of 4):

Effective Date: September, 2006  Planned Review Date: September, 2009
Literature Search Conducted: Update to endorsed guideline
Summary Prepared By: Dr. J. Dollin, Dr. V. Palda, Dr. A.K. Kapur

Ontario Guidelines Advisory Committee
500 University Ave., Suite 650,
Toronto, ON M5G 1V7
Telephone: 416-946-7899
Fax: 416-971-2462
Email: contact@gacguidelines.ca