Summary of Recommended Guideline

Occupational Asthma

Key Message:
Asthma symptoms that begin or worsen while at work may be occupationally related. Early recognition and treatment of occupational asthma and workplace modification can improve clinical outcomes.

What evidence-based recommendations exist to help in the diagnosis and treatment of occupational asthma?

1. When should the practitioner suspect that asthma is work-related?

A history of asthma symptoms worsening at work, or following work shifts, or improvement during weekends or holidays off work is a useful screening question for detecting work-related asthma. (Level 2)

2. What diagnostic tests should be used to diagnose occupational asthma?

Asthma symptoms should be assessed with pulmonary function tests. These tests are most effective in diagnosing or excluding asthma if performed when the patient has symptoms (for spirometry) or within 24 hours after the patient is symptomatic (histamine or methacholine challenges). These tests may need to be repeated when the patient is back at work. (Level 2).

3. If the practitioner is suspicious of occupational asthma based on history and diagnostic tests, what are key recommendations for management?

a. Early referral to a specialist in occupational lung disease is beneficial in patients suspected of having occupational asthma because diagnosis is often complex. (Level 3)
b. Early and complete removal from exposure to a known sensitizer* in patients with confirmed OA leads to the best prognosis. (Level 2).
c. A definite, objective diagnosis of the work relationship should be made before advising the patient to leave their job (Level 3)
d. Management of asthmatic symptoms should conform to the recent Canadian guidelines in relation to general and specific environmental control measures and the use of appropriate medications and patient education. [insert link to Endorsed Asthma Guideline] (Level 3).
Levels of Evidence

The levels of evidence used to grade the recommendations in this guideline are as follows:

Level 1: Evidence from at least one RCT
Level 2: Evidence from at least one well-designed clinical trial without randomization, from cohort or case-control analytical studies, preferably from more than one centre, from multiple time series or from dramatic results in uncontrolled experiments.
Level 3: Evidence from opinions of respected authorities based on clinical experience, descriptive studies or reports of expert committees.

*Sensitizer: Occupational Health and Safety Administration (US)
A sensitizer is defined by OSHA as "a chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical."

Additional Resources

What should the practitioner know with respect to communication with the Work Safety and Insurance Board (WSIB)?

Where the diagnosis of Occupational Asthma is supported, the physician should determine whether their patient is interested in and eligible for worker’s compensation. Before any claims are submitted, consent for reporting to the WSIB should be obtained from the patient. Further details can be found at WSIB Program of Care: http://www.wsib.on.ca/wsib/wsibsite.nsf/public/healthpocfoa

The above recommendations were derived from the following GAC endorsed guideline:


Rating (out of 4): 🍎🍎🍎🍎

Scope: For physicians and other health care professionals who see patients with occupational risks for asthma

Effective Date: September, 2005
Planned Review Date: September, 2008
Literature Search Conducted: December, 2004

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

www.gacguidelines.ca