

BOHRF

OCCUPATIONAL ASTHMA

A GUIDE FOR
GENERAL PRACTITIONERS
AND
PRACTICE NURSES

OCCUPATIONAL ASTHMA

A guide for general practitioners
and practice nurses.

- **Occupational asthma accounts for up to 15% of all adult asthma.**
- **It is the most commonly reported occupational respiratory disorder in westernised industrial countries.**
- **Generally occupational asthma has a poor prognosis and is likely to persist and deteriorate unless identified and managed early and effectively.**

THIS GUIDE HELPS –

- To outline the key recommendations of the first systematic evidence review of the prevention identification and management of occupational asthma. [The full guidelines are available from the British Occupational Health Research Foundation (BOHRF)].
- Increase primary health care professionals' knowledge of occupational asthma and its management.
- Encourage early referral because this affords patients the best chance of improvement or cure.

ABOUT THIS GUIDE

Occupational asthma is a significant problem within the United Kingdom. The Health and Safety Executive (HSE) estimate that between 1,500 and 3,000 people will develop occupational asthma each year.

This guide will help you in your clinical practice to manage occupational asthma. It will increase your knowledge of the differential diagnosis of occupational asthma and its subsequent management.

It gives a brief summary of the 2004 occupational asthma guidelines, which are evidence and research based

WHAT IS OCCUPATIONAL ASTHMA?

This is new onset adult asthma caused by exposure to the workplace and not by factors outside of the workplace.

Occupational Asthma is subdivided into two groups:

1. Immunologic occupational asthma in which there is a time delay between exposure to a respiratory sensitizer and the development of symptoms;
2. Non- immunologic occupational asthma that typically occurs within a few hours of high concentration exposure to an irritant at work.

- Most cases of occupational asthma are of the immunologic type.
- Occupational asthma is preventable. Symptoms may resolve completely with early diagnosis and early removal from exposure.
- Prevention and cure depends upon effective control of exposure to respiratory sensitizers in the workplace and early diagnosis.
- The development of occupational asthma has long term adverse health and economic consequences.
- In some cases occupational asthma has proven to be fatal.

WHO IS AT RISK OF DEVELOPING OCCUPATIONAL ASTHMA?

The most commonly reported professions to suffer from occupational asthma are:

- ANIMAL HANDLERS
- BAKERS AND PASTRY MAKERS
- CHEMICAL WORKERS
- FOOD PROCESSING WORKERS
- NURSES
- PAINT SPRAYERS
- TIMBER WORKERS
- WELDERS

WHAT CAN HEALTH PROFESSIONALS DO?

Early diagnosis.

Consider the possibility of an occupational asthma diagnosis in all new cases of adult asthma.

Ask each new adult presenting with asthma symptoms or rhinitis about their job and the substances with which they work; referral to a physician with expertise in occupational asthma may be appropriate if they fall into one of the high risk professions listed. It is important to remember that rhinitis occurring in patients in high risk professions might signal an increased risk of developing occupational asthma within 12 months of the onset of rhinitis.

An improvement in symptoms when away from work has been shown to be a good indicator that occupational asthma may exist. Therefore, ask the following questions:

- When did the symptoms start?
- Do their symptoms vary when not at work?
- Do their symptoms improve when away from work?

Does a long holiday improve their asthma symptoms? (This is more reliable than asking if symptoms increase upon return to work.)

LUNG FUNCTION TESTS HELP WITH DIAGNOSIS

- Measure peak expiratory flow rate at least four times a day, for at least three weeks and analysed by a validated method.
- Serial peak expiratory flow rates carried out according to established protocols and interpreted appropriately will provide few false positive results, but about 30% false negatives.

The diagnosis of occupational asthma should be confirmed by a specialist in this field. However, there are a limited number of centres that can provide such expertise in the UK.

Blood tests for specific IgE to suspected allergens help to identify sensitization, and together with other symptom related evidence will help identify the causative agent.

PROGNOSIS

Prognosis will improve for many provided they are withdrawn from exposure to the substance provoking their asthma at an early stage. Those workers who remain in the workplace which has induced their asthma are unlikely to improve and symptoms may worsen. Therefore specialist input is essential as early as possible.

Those who have relatively normal lung function at time of diagnosis and shorter duration of symptoms prior to diagnosis will have the greatest improvement.

MANAGEMENT OF OCCUPATIONAL ASTHMA

Ideally, management involves redeployment to an environment with complete and permanent avoidance of exposure of allergen provoking asthma. However, in practice this may not be possible due to social, economic and personal factors of the individual. If complete avoidance of allergen is not possible, the individual should relocate to an area with less or occasional exposure to the allergen and remain under increased medical surveillance.

Routine management of asthma should follow the already established guidelines for example BTS (2003) "Asthma management guidelines".

Employers may have an occupational health service with whom the primary care team may liaise, with the patient's consent.

ACKNOWLEDGEMENTS

The evidence review report on which this summary of evidence for health professionals is based, has been made possible by the commitment of the Research Working Group, and others, listed in the full evidence review report, and the generous funding contributions from Department of Health (NHS Executive), Diageo Scotland, Pfizer, Rank Hovis McDougall, Rolls-Royce plc and Unilever. HSE provided the support of the Scientific Secretary. The RCGP and the RCN provided the writers of this summary which is based on relevant parts of the evidence review report.

FURTHER INFORMATION

British Occupational Health Research Foundation

<http://www.bohrf.org.uk>

Health & Safety Executive

<http://www.hse.gov.uk/asthma>

General Practice Airways Group

<http://www.gpiag.org>

OASYS and Occupational Asthma

<http://www.occupationalasthma.com>

BTS / SIGN Guidelines

<http://www.sign.ac.uk>

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