

PRINTED HANDOUT

AAAAI 2014

Seminar 4824. Occupational Respiratory Diseases – work-related asthma

Monday, March 03, 2014, 4.45-5.45 am (Andre Cartier and Susan M Tarlo)

Susan M Tarlo MB BS, FRCP(C), FAAAAI, University of Toronto, Canada

– 1 page seminar handout

Case examples for discussion will be provided during the seminar

Key Points

- Index cases will initially be identified from a detailed history in patients with asthma whose symptoms begin during working life.
- Suspicion is raised by a history of asthma symptoms worsening during work periods and improving when away from work such as weekends or holidays
- There may be associated symptoms of allergic rhinitis and conjunctivitis worse at work, and there may be a history of co-workers with similar symptoms
- A detailed exposure history should then be obtained including agents used by the patient at work but also agents that co-workers may be using in the same area. Additional assistance may be obtained by requesting Material Safety Data Sheets from the workplace for review.
- It is important to recognize that asthma may be due to a previously unreported sensitizing agent or to a known agent used in a format previously unreported to cause asthma.
- Asthma in the patient should be objectively confirmed (by bronchodilator response or methacholine challenge) at a time when there have been recent symptoms (not at the end of a holiday away from work when tests could be negative).
- Serial peak flow monitoring during periods at work and away from work, and assessment of methacholine challenge at the end of a working week and at the end of a holiday off work (or other period away from the suspected work area) should be performed to document any improvement away from the work environment which would support occupational asthma.
- Skin prick tests or in-vitro tests for serum specific IgE antibodies may be performed using extracts of exposure agents at work that are potential high molecular weight allergens. Commercial extracts may not be available raising consideration for cautious testing with dilutions of crude extracts, using appropriate controls.
- If the previous findings are suggestive but inconclusive, then specific inhalation challenges may be helpful in a facility with expertise in challenges.
- Finding of an index case should be considered as a sentinel event leading to consideration of other workers with similar exposures. This may be reported (with permission of the patient) to a company physician and/or public health agency, in order to evaluate exposure controls and the possibility of symptoms and disease in co-workers.
- Publication of a case report in a scientific journal also disseminates awareness of a newly recognized sensitizer.