More than just old age

Asthma in older adults presents challenges in diagnosis, treatment and self management

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Asthma in elderly patients is more common than previously understood. The lifetime asthma prevalence in Australians aged 45 years and older is 15% compared with 10–12% in the general population.[1] Moreover, most asthma deaths occur in patients aged 65 years and over, especially in winter – yet up to one-third of older adults with asthma are not identified by their doctors.

Breathlessness in older patients may be accepted as age related, or cough, wheeze and dyspnoea may be attributed to comorbidities, and social isolation may delay presentation.

Diagnosis

Diagnosis is the first challenge. Breathlessness in the elderly can have many aetiologies, and asthma may not immediately come to mind when assessing older patients. Conversely, be aware that patients with an unsubstantiated past history of asthma may have undiagnosed chronic obstructive pulmonary disease (COPD).

Although diagnosis and treatments for respiratory disease can overlap, it is important to have a firm diagnosis.

Spirometry is essential for detecting airflow limitation in both asthma and COPD. Frailty, deafness and limited airway responsiveness may make spirometry difficult in older patients.

Table 1 outlines factors that distinguish asthma from COPD. Onset in middle age smokers with no family history or atopy is likely to be COPD. Patients with COPD should be managed according to the COPD-X guidelines developed by the Australian Lung Foundation and the Thoracic Society of Australia and New Zealand.[2]

A diagnostic treatment trial can provide helpful information. A 4–8 week trial of inhaled corticosteroids (ICS) at 500–1000 mcg fluticasone or 800–1600 mcg budesonide (or equivalent) may be useful, and ICS is preferable to using oral steroids. The response should be measured according to asthma control, symptoms and spirometry.

Table 1. Factors that distinguish asthma from COPD

Factor	Present in	
	Asthma	COPD
Young age at onset	Often	Almost never
Sudden onset of disease	Often	Almost never
Smoking history	Sometimes	Almost always
Allergy	Often	Sometimes
Dyspnoea	Often	Often
Wheezing	Often	Sometimes
Coughing	Sometimes	Often
Sputum production	Seldom	Often
Chronic airflow limitation	Seldom	Almost always
Variable airflow limitation	Almost always	Seldom
Reversible airflow limitation	Almost always	Almost never
Airway hyperresponsiveness	Almost always	Sometimes
Diurnal peak expiratory flow variability	Almost always	Sometimes

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Medical treatment

Start with lower initial doses for some drugs (eg. salbutamol) and beware of potential interactions with other treatments, such as hypokalaemic effects of concomitant beta-2 agonists and diuretics.

Older patients may have cognitive difficulties or impaired dexterity that affects their ability to coordinate ICS delivery devices. Use the same type of inhaler for all inhaled medications when more than one is prescribed, if possible. Patients with comorbidities may require nebulisers, however in most patients nebulisers are no more effective than using a metered dose inhaler with spacer[3] and so are not generally recommended.

Ensure all patients aged over 65 years with asthma and/or COPD have annual influenza immunisation and appropriate pneumococcal immunisation according to NHMRC recommendations.

Self management

Patient education remains important in this group, but impairments of cognitive function and eyesight need to be taken into account. Consider large print asthma action plans and involve carers where appropriate. Patients who have reduced perception of airways limitation may be helped by a peak flow based asthma action plan. It should be stressed that overreliance on nebulisers during an acute episode may delay effective treatment and increases the risk of life threatening asthma.

Older patients are often on multiple medications and may benefit from a home medicines review by a community pharmacist.

Like all patients with chronic disease, older adults with asthma should have regular review of their asthma control, response to therapy, medication adherence and inhaler technique.

For information on asthma diagnosis and management, spirometry resources and asthma action plans, visit the National Asthma Council Australia (NAC) website at www.nationalasthma.org.au

The NAC's recent panel discussion program 'Breathlessness in the older adult: is it asthma?' is now available via the NAC website or from the Rural Health Education Foundation at www.rhef.com.au/programs/815/815.html ♦

1. National Asthma Council Australia. Asthma management handbook 2006. Melbourne: NAC, 2006. Available at www.nationalasthma.org.au/cms/index.php
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3. Cates CJ, Bara A, Crilly JA, Rowe BH. Holding chambers versus nebulisers for beta-agonist treatment of acute asthma. Cochrane Database Syst Rev. 2003;(3):CD000052