

Guideline may lead to more pharmacist interventions over high-dose steroids

The new BTS/SIGN asthma guideline provides opportunities for pharmacists to become more involved in managing chronic conditions. Naomi Kempner reports

PHARMACISTS could find themselves making more interventions on prescriptions for asthma patients in the light of a new asthma guideline published last week.

The updated guideline on asthma management comes from the British Thoracic Society and the Scottish Intercollegiate Guidelines Network (P7, 1 February, p141).

According to respiratory pharmacist Anna Murphy, Glenfield Hospital, Leicester, one of the biggest changes involves new recommendations on doses of inhaled steroids (see Panel 1), largely unspecified in previous guidance.

The guideline advocates introduction of inhaled steroids for patients with recent exacerbations, nocturnal asthma or impaired lung function or those using β_2 -agonists more than once a day. It also recommends that inhaled steroids be initially given twice daily with once a day administration considered if good control is established.

Another difference in the new guideline comes at step 3 in treatment. Before increasing the daily dose of inhaled steroid above 800 μ g in adults and 400 μ g in children, prescribers are urged to recheck compliance, recheck inhaler technique, and carry out a trial of other treatments as add-on therapy.

Panel 1: Steroid dose

- 400 μ g per day is a reasonable starting dose of inhaled steroid in adults (referring to beclometasone given via a metered dose inhaler)
- 200 μ g per day is a reasonable starting dose for children (doses at or above 400 μ g may be associated with systemic side effects)
- Children under five may need a higher dose if there are problems in obtaining consistent drug delivery
- Titrate the dose of inhaled steroid to the lowest dose at which effective control of asthma is maintained

Panel 2: Acute attack

Consider giving a single stat dose of IV magnesium sulphate for patients with:

- Acute severe asthma who have not had a good initial response to inhaled bronchodilator therapy
- Life threatening asthma

IV magnesium sulphate (1.2–2g over 20 minutes) should only be used following consultation with senior medical staff.

The guideline recommends that inhaled long acting β_2 -agonists (LABAs) are first choice add-on therapy in adults and children over five years. Other add-on treatments are leukotriene receptor antagonists (included for the first time), theophyllines and slow release β_2 -agonist tablets (in adults only).

According to Ms Murphy, "Pharmacists should ideally be getting back to prescribers to discuss high doses of inhaled steroids.

"Prescribers forget that Qvar (in well controlled asthma) and fluticasone are double the potency of beclometasone, with patients ending up on large doses.

"Large doses of inhaled steroids should be reduced in any patient, even those who have been stable for three months or more. The guideline recommends slow reductions, considered every three months, decreasing the dose by about 25–50 per cent each time," Ms Murphy says.

Ms Murphy says that recommendations for using inhaled LABAs first choice as add-on therapy reflect some excellent data published since previous guidelines. However, she notes that inhaled LABAs do not work for every patient. She concurs with advice in the guideline to stop ineffective LABA treatment, increasing steroid doses to 800 μ g daily (adults) or 400 μ g (children 5–12) and trying other add-on therapy if control is still inadequate.

Pharmacy intervention should also be considered when anticholinergics are prescribed in anything other than mild, intermittent asthma. Anticholinergics are no longer considered an option for add-on therapy. Although some patients have a mixture of asthma and chronic obstructive pulmonary disease, in which anticholinergics are useful, Ms Murphy doubts this will be the case for patients under 40 years who have never smoked.

Other changes in the guideline noted by Ms Murphy include:

- Oral prednisolone dose for acute attacks in adults increased (now 40–50mg daily)
- Doubling the dose of inhaled steroids at the time of an exacerbation now cited of unproven value
- Patients to continue inhaled steroids through an acute attack. There is no added benefit but it forms the start of the chronic asthma management plan (discontinuation can lead to their exclusion from discharge notes)
- Inhaled β_2 -agonists deemed at least as efficacious and preferable to the intravenous (IV) route in the majority of adult acute asthma cases
- IV aminophylline now recommended only in near fatal or life threatening cases

PHARMACIST REVIEW

The guideline nominates pharmacists as one of the health professionals suitable to carry out routine clinical review of people with asthma, though it says that nurses with training in asthma management may achieve better outcomes for their patients.

The new guideline is published as a supplement to the February issue of *Thorax* (2003;58) and can be downloaded from the BTS website (www.brit-thoracic.org.uk).

Pharmacy input to BTS guideline

Four pharmacists were involved in the production of the guideline. One is Allan Smith, senior pharmacist, Gartnavel General Hospital, Glasgow. He believes that the earlier use of LABAs would be a major change pointed out, particularly by manufacturers of these drugs.

For hospital pharmacists, he highlights the new inclusion of intravenous magnesium sulphate for the treatment of acute asthma (see Panel 2). Mr Smith also points out that the common problem of compliance and underdosing in asthma is recognised by a new section in the updated guidance. "Without compliance the guidelines are meaningless," he says.

Another pharmacist involved with the development of the update is Heather Black, clinical pharmacy manager, Western Infirmary, Glasgow. She points out that there could be cost implications for patients starting LABAs, or other add-on therapies, in step 3, rather than increasing their doses of inhaled steroids.