Workshop series: The management of asthma and COPD

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Introduction

Throughout the latter half of 2007, a series of half-day workshops sponsored by Teva UK Ltd was held to highlight new developments in the management of asthma and chronic obstructive pulmonary disease (COPD). The content of these meetings was developed from a previous series of successful workshops that had been held in 2005 and 2006. The principal aim was to identify areas of particular relevance to primary care such as: the need to phase out CFC-containing inhalers; the importance of selecting the most appropriate inhaler device for each patient; and the continuing impact of the GMS contract and revised quality indicators for the management of patients with COPD.

I had the privilege of chairing and presenting at these workshops, which took place at venues across the country. Each meeting had an average attendance of 48 delegates—mostly GPs and practice nurses, although a number of hospital clinicians, specialist respiratory nurses, community matrons, physiotherapists, commissioning managers, and pharmacists also attended.

Overview of the presentations

The programme and speakers varied between venues. All of the workshops included presentations on achieving the GMS contract quality indicators for COPD and the role of mucolytic therapy in treating cough and sputum production. There were also presentations on two of the following three asthma topics: the phasing out of CFC-containing inhalers, the choice and use of inhaler devices, and the importance of self-management. The main points of the presentations are summarised below.

Achieving the GMS contract quality indicators for COPD

During these presentations the speakers explored the problems of managing COPD in primary care, often by posing the rhetorical question 'Does collecting data for the Quality and Outcomes Framework (QOF) actually improve the standard of care for COPD patients?'

Recurring themes mentioned by most of the speakers included:

- the difficulties in compiling a disease register
- the need for training in spirometry and interpreting spirometry results
- the conflict between the QOF[1] and NICE[2] guideline in:
    - defining the forced expiratory volume (FEV_1) level for diagnosis (<70% or <80% of predicted normal, respectively)
    - the need for routine reversibility testing.

Overall, the speakers (and most of the delegates) were remarkably positive about the improvements in the primary care management of COPD, and the publication of the National Service Framework on COPD this year is eagerly anticipated.

Mucolytic therapy for cough and sputum production in COPD

The extent to which a chronic productive cough, and especially difficulty in bringing up thick tenacious sputum, can seriously embarrass patients is often underestimated, and the effectiveness of mucolytic drugs in alleviating this problem is not widely appreciated.

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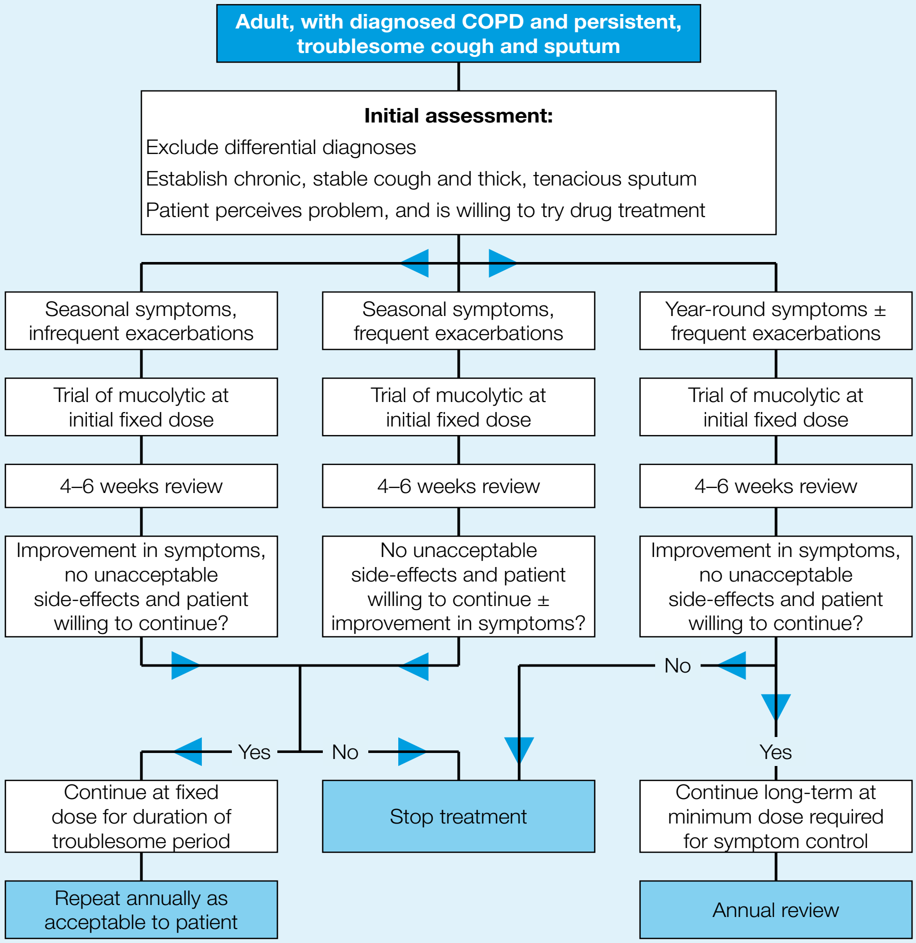
Figure 1. Mucolytic therapy in patients with diagnosed COPD and troublesome cough and sputum[3]



COPD=chronic obstructive pulmonary disease

The current NICE COPD guideline[2] recommends that mucolytic therapy should be:

- considered in patients with a chronic cough productive of sputum
- continued if there is symptomatic improvement (for example, reduction in frequency of cough and sputum production).

The NICE guideline[2] does not always provide sufficient information on precisely who to treat and, therefore, at each workshop I described the details, including the treatment algorithm, of a more comprehensive consensus guideline on mucolytic therapy (Figure 1).[3] The potential benefits of mucolytic therapy, including its role in preventing exacerbations, impressed attendees at the workshops, and 85% stated in their feedback forms that they would increase their use of these drugs.

Self-management in asthma

Speakers at three of the venues highlighted the need for effective self-management programmes in asthma and the need for better consultations. It was noted that despite enormous improvements in our knowledge and understanding of asthma over the past few years, there are still large numbers of people with poorly controlled asthma and an unacceptably high level of need for emergency healthcare and preventable hospital admissions.

It was shown that appropriate patient education and self-management were associated with:

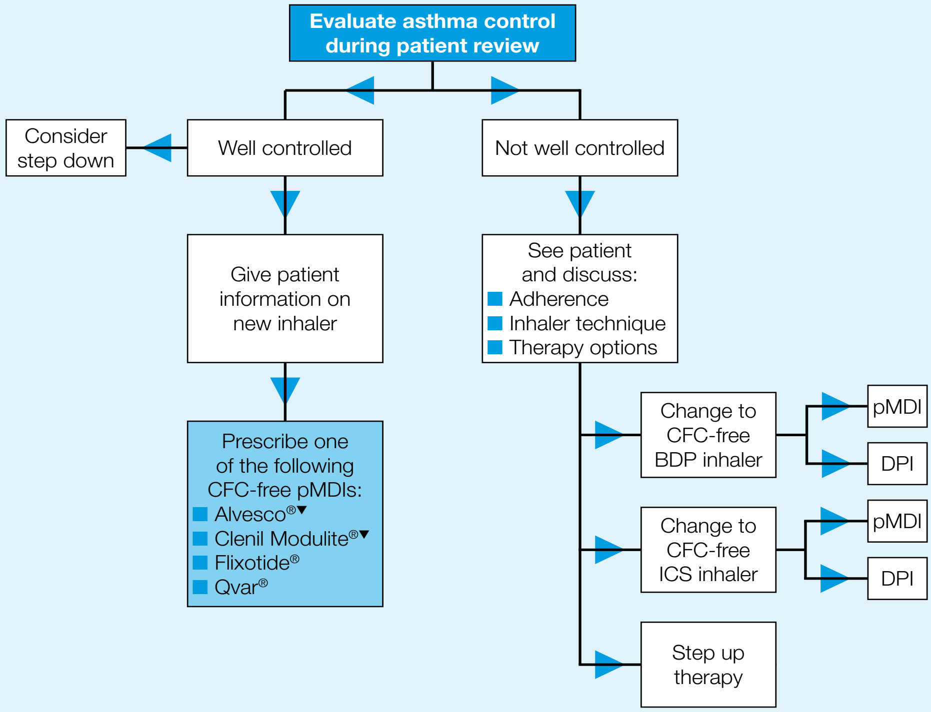
- reductions in unscheduled GP visits
- reductions in hospital admissions
- reductions in the number of days off work or school.

There was total support for the view that for anyone with asthma 'a self-management plan is an invaluable way of making sure that your asthma doesn't stop you from getting on with the things that you want to do.'

Phasing out CFC-containing inhalers in asthma

At four of the workshops there was a presentation focusing on chlorofluorocarbon (CFC) containing inhalers that deliver beclomethasone dipropionate (BDP) and the fact that these devices may not be available after mid-2008. This is because stocks of CFCs are dwindling and manufacturers are

Figure 2. Managing the transfer to CFC-free ICS inhalers for patients currently using CFC-containing BDP devices[4]



CFC=chlorofluorocarbon; BDP=beclometasone dipropionate; pMDI=pressurised metered-dose inhaler; ICS=inhaled corticosteroid; DPI=dry powder inhaler

discontinuing the production of CFC-containing BDP devices. Patients currently using these devices will require new inhalers and strategies for dealing with this were outlined, including information from the recently published consensus guideline on phasing out CFC-containing inhalers in asthma (Figure 2).[4]

Key points from the presentation included:

- the need to change inhalers is only necessary for patients currently using CFC-containing BDP inhalers
- patients should be reassured about their old inhaler
- support and education (including written information) should be provided
- attention must be paid to the dose of the replacement product (different formulations may require different doses); this is especially important for children.

Many of the attendees (especially pharmacists) were concerned about the possible economic consequences of the transition to CFC-free inhaler devices, but all agreed that any direct costs associated with changes in medication could easily be eclipsed by the indirect costs incurred if inadequate patient support resulted in reduced asthma control.

Choice and use of inhaler devices

In this presentation, it was emphasised that knowledge of how inhalers really work (including the crucial roles of particle size, speed of inhalation, and particle deposition in the lung) was just as important as a detailed knowledge of the pharmacology of the inhaled drug and any theoretical differences between different steroid molecules.

Points highlighted by the speakers included that:

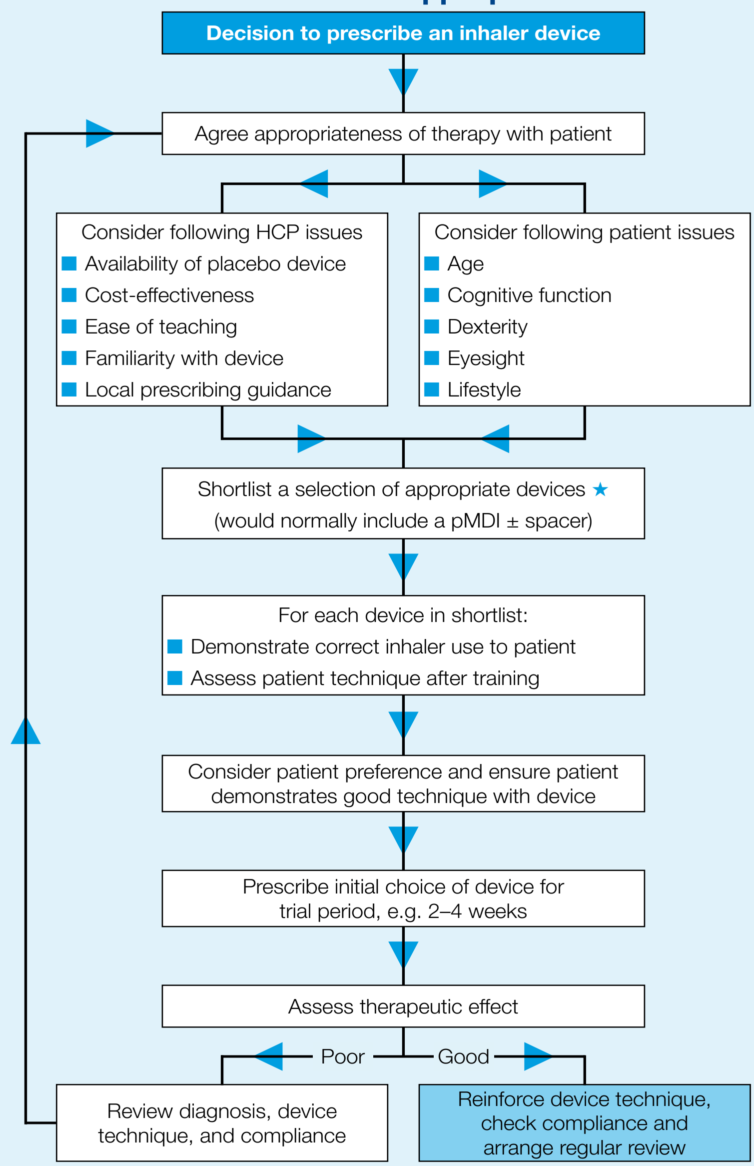
- good inhaler technique is absolutely fundamental to optimal drug delivery
- finding the most suitable device for a patient is key
- incorrect inhaler technique can seriously compromise asthma management and should, therefore, always be checked before stepping-up therapy
- special attention should be paid to children and the elderly.

The recently published consensus guideline and algorithm (Figure 3)[5] on the selection of the most appropriate inhaler device for each patient were commended as being particularly helpful.

Positive feedback

All of the workshops were well received by the attendees, with the vast majority stating that the content had been very relevant to their management of patients with asthma and COPD. Data gathered from feedback forms indicated that many of the delegates were now going to develop local plans for CFC transition and initiate patient reviews for this.

Figure 3. Algorithm for the selection of the most appropriate inhaler device for each patient[5]



★ Choice of device may determine choice of molecule, and vice versa
HCP=healthcare professional; pMDI=pressurised metered-dose inhaler

Substantial numbers also indicated their intention to increase the use of patient self-management plans.

At three of the workshops where the ability to use metered-dose inhalers was discussed, a novel method of feedback was obtained by offering delegates the opportunity to check their own inhaler technique with an aerosol inhalation monitor (AIM) machine. Out of 68 healthcare professionals who did this, only 12 achieved a perfect score with correct inspiratory flow, synchronisation, and breath hold. Perhaps not unrelated to this was the feedback that 39% of delegates would consider making increased use of breath-actuated inhalers.

Particularly gratifying were the high feedback scores given to all of the speakers for both content and style of their presentations, and the positive comments made by the delegates about how they intend to improve their asthma and COPD services.

I am grateful to all those who helped make these meetings so successful and to the delegates for their invaluable contributions to the discussion periods.

References

1. British Medical Association. *Revisions to the GMS Contract, 2006/07. Delivering Investment in General Practice.* London: BMA, 2006.
2. National Institute for Health and Clinical Excellence. *Chronic obstructive pulmonary disease: management of chronic obstructive pulmonary disease in adults in primary and secondary care. Clinical Guideline 12.* London: NICE, 2004.
3. Rudolf M, Bellamy D, Burrill P et al. *Prolonged mucolytic therapy in patients with diagnosed COPD.* Berkhamsted: Medendium Group Publishing Ltd, 2006.
4. Thomas M, Angus R, Fehrenbach C et al. *Consensus guideline on phasing out CFC-containing inhalers in asthma.* Berkhamsted: Medendium Group Publishing Ltd, 2007.
5. Thomas M, Chrystyn H, Leyshon J et al. *Consensus guideline on the use of inhaler devices in asthma.* Berkhamsted: Medendium Group Publishing Ltd, 2007.