



INTRODUCTION

E.D. Bateman

In the management of chronic obstructive pulmonary disease (COPD), achieving sustained bronchodilation through the regular use of long-acting bronchodilators is currently the best treatment option for symptomatic patients. Delivery of these drugs *via* inhalation therefore needs to be adequate and reliable to maximise the benefits of such treatment. However, current treatment guidelines contain little advice on the key elements of inhalation therapy; namely, delivery devices and their performance in COPD, approaching inhaler selection, methods for improving compliance and the impact of patient preference on drug delivery and treatment outcomes.

To explore this topic in more detail, a Round Table meeting, sponsored by Boehringer Ingelheim GmbH, was held in Zürich, Switzerland, on 3–4 June 2005. The papers in this Review arise from the proceedings of that meeting. Our purpose was to consider the subject of inhaler use and selection in COPD, and how compliance and treatment outcomes might be improved by taking patient preference

CORRESPONDENCE: E.D. Bateman, UCT Lung Institute, PO Box 34560, 7937 Groote Schuur, Cape Town, South Africa. Fax: 27 214066902. E-mail: ebateman@uctgsh1.uct.ac.za

into account. Our discussion was broken down into the following categories: patient needs and medication styles [1]; communication between patient and doctor [2]; adherence to therapy [3]; advantages and disadvantages of the main types of inhaler devices and how they affect technique [4]; assessment of device preference and satisfaction [5]; and the role of the caregiver in choosing the inhaler device [6]. A summary of the points from each paper is provided below.

REFERENCES

- 1 Osman LM, Hyland ME. Patient needs and medication styles in COPD. *Eur Respir Rev* 2005; 14: 89–92.
- 2 Booker R. Effective communication with the patient. *Eur Respir Rev* 2005; 14: 93–96.
- 3 Rand CS. Patient adherence with COPD therapy. *Eur Respir Rev* 2005; 14: 97–101.
- 4 Newman SP. Inhaler treatment options in COPD. *Eur Respir Rev* 2005; 14: 102–108.
- 5 Anderson P. Patient preference for and satisfaction with inhaler devices. *Eur Respir Rev* 2005; 14: 109–116.
- 6 Chapman KR, Voshaar TH, Virchow JC. Inhaler choice in primary practice. *Eur Respir Rev* 2005; 14: 117–122.

SUMMARIES FROM THE REVIEW PAPERS

IMPROVING INHALER USE IN COPD AND THE ROLE OF PATIENT PREFERENCE

E.D. Bateman

- The pathophysiology of chronic obstructive pulmonary disease and asthma differ, and require different treatment approaches.
- Maintenance of sustained bronchodilation has been shown to improve several key clinical and physiological features of disease.
- The management of chronic obstructive pulmonary disease presents challenges relating to the age and expectations of patients, and their readiness to use and ability to handle inhaled drugs.
- Ensuring efficient delivery of drugs in chronic obstructive pulmonary disease patients is vital to treatment success but has received little attention.
- The three key factors in ensuring effective inhalation therapy are: the characteristics of the inhalation device; the patient's knowledge, attitudes and preference; and the physician's familiarity with inhalers and their skill in understanding the patient's needs and preferences.

Together, these factors influence satisfaction with therapy, which may affect long-term adherence and clinical outcomes.

PATIENT NEEDS AND MEDICATION STYLES IN COPD

L.M. Osman and M.E. Hyland

- The need of chronic obstructive pulmonary disease patients for independence, control of their condition and maintenance of social functioning may conflict with their need to control their symptoms. Occasionally, some patients will trade-off symptom control in order to satisfy these psychological needs.
- Patients with chronic obstructive pulmonary disease react to their disease in different ways and adopt a variety of self-care styles in how they manage it. Recognising these personal styles will assist in effective management.
- The typical health path for a chronic obstructive pulmonary disease patient is a long-term deterioration with little or no chance of returning to "normality". This often makes

patients conservative and stoical about their health goals and their expectations of treatment benefits.

- Patients with chronic obstructive pulmonary disease seem to take a pragmatic approach towards choice of inhaler devices and usually base their preference on how effective the drug–device combination is perceived to be.

EFFECTIVE COMMUNICATION WITH THE PATIENT

R. Booker

- Humanity, respect and a people-focussed attitude are vital to good communication with patients.
- The goals of good communication are to avoid patient misunderstanding and uncertainty, improving management decisions by healthcare professionals and resulting in a more satisfied patient.
- Physicians and nurses should aim to: achieve a shared understanding with patients (concordance); involve them in decision-making; and encourage them to accept responsibility.
- Greater patient satisfaction may improve concordance and so bring about better outcomes.

PATIENT ADHERENCE WITH COPD THERAPY

C.S. Rand

- Very few published studies focus on adherence to treatment regimens in chronic obstructive pulmonary disease, but evidence suggests adherence is poor.
- Patients' beliefs about their disease influence adherence rates.
- Healthcare professionals in primary or specialist care who are prescribing treatment should ask the patient about adherence as a vital part of the consultation.

INHALER TREATMENT OPTIONS IN COPD

S.P. Newman

- A variety of portable inhaler devices are now available for treating patients with chronic obstructive pulmonary disease and more new designs are in development; each type of device has advantages and disadvantages.
- The plethora of inhalers with differing instructions may confuse patients and healthcare providers alike.
- Any inhaler can be misused so that little or no drug is deposited in the lungs.
- "Crucial" errors in inhaler technique, resulting in no drug deposition in the lungs, must be avoided.
- There is increasing recognition that a successful treatment outcome in chronic obstructive pulmonary disease depends as much on the inhaler device as on the drug.

- Inhaler choice in chronic obstructive pulmonary disease should take into account: the likelihood of the patient using the inhaler correctly; patient preference; and likely compliance.

PATIENT PREFERENCE FOR AND SATISFACTION WITH INHALER DEVICES

P. Anderson

- Inhaler preference is a valid patient-reported outcome worthy of scientific study.
- Preference for and satisfaction with inhaler devices may be associated with improved clinical outcomes, but this has not been proven to date.
- Patients who have unstable disease or are unable to use inhalers are usually excluded from preference and satisfaction studies, and in everyday practice, patients rarely receive the degree of instruction and coaching given in such studies.
- Of the 29 studies found in the search performed for this article, only two used robust instruments for measuring preference and satisfaction.
- Assessment and reporting of preference and satisfaction should be subject to the same rigorous regulatory standards as other patient-reported outcomes.

INHALER CHOICE IN PRIMARY PRACTICE

K.R. Chapman, T.H. Voshaar and J.C. Virchow

- Primary practitioners should familiarise themselves with the characteristics of several inhalers and choose a device that a chronic obstructive pulmonary disease patient can use correctly and that will be of benefit to them.
- The selection of a device for a chronic obstructive pulmonary disease patient may be influenced by patient comorbidities as well as by the patient's ability to handle the device and perform the necessary inhalation manoeuvres.
- When selecting a device for the patient with respiratory disease, the primary practitioner should check that it is affordable and that the patient can handle it correctly. The patient's and physician's preferences should also be taken into account.
- The patient's ability to handle a device should be assessed by the practitioner or other trained professional. They should also assess whether the patient can properly prepare and actuate the device, take an adequate inspiration and coordinate actuation of a pressurised metered-dose inhaler with inspiration.

DOI: 10.1183/09059180.05.00009608

Copyright©ERSJ Ltd 2005