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EDITORIAL

Issues in Inhalation Therapy: a new series of papers from the ADMIT Working Group

See paper by Dekhuijzen *et al* on page 341

Inhalation therapy is the cornerstone of the pharmacologic treatment of patients with asthma and chronic obstructive pulmonary disease (COPD). Virtually all patients with these conditions will be treated with inhaled bronchodilators and, if indicated, inhaled corticosteroids (ICS) at some time during their lives. Inhaled therapy administered by pressurised metered dose inhalers (pMDIs) and dry powder inhaler (DPIs) has been in common use since the 1960s; DPIs can be administered by means of inhalers with one or more doses, and pMDIs can be used with or without breath actuation (in which inhalation initiates delivery) or in combination with a spacer. The advantages of inhaled therapy are clear: the drug is directed towards the target organ which reduces the dose of drug needed and limits systemic exposure. Simultaneously, there has always been awareness that inhalation of medications is relatively difficult and that it requires education and skills.

Surveys of inhaled therapy in asthma and COPD reveal patients' difficulties in handling inhalation devices, which undoubtedly contributes to suboptimal disease control. Finding hard evidence for this assumption, however, is difficult. One way of discussing and assessing the magnitude and significance of problems with inhaled medications is to identify essential issues which lead to optimal treatment of patients in daily practice.

There are three important issues when treating patients with inhaled medication: 'WHO' – i.e., what are the patient characteristics in terms of pressure and flow generation in stable and unstable conditions which determine which patient is suitable for which inhaler; 'WHERE' – i.e., where is the disease process located which one wants to target and modify; and 'HOW' – i.e., which device is the most optimal for a specific patient, taking into account a number of essential aspects of the inhalation technology of pMDIs and DPIs such as dose delivery, particle size distribution, dependence on inspiratory flow rate, and drug deposition. These considerations have consequences in the choice of a specific pMDI or DPI for patients with asthma or COPD.

A number of European experts on inhalation therapy recently joined to form the Aerosol Drug Management Improvement Team (ADMIT) – see Appendix below – and have taken on the challenge of analysing issues related to the optimal and suboptimal use of inhaled medication. In this issue of the *Primary Care Respiratory Journal*, we present the first paper[1] in a series of papers to be published in this journal on Issues in Inhalation Therapy. The series will focus on various topics in relation to inhalation therapy, including the aims of therapy in adults and children with asthma and COPD, the characteristics of inhaled medication, their use in daily practice in stable and unstable disease, and ways to optimise inhaler use. We aim to provide the reader with an up-to-date and evidence-based review article on each subject, and each paper will contain clear recommendations for use in daily practice. Our aim is that this series of Issues in Inhaled Therapy should be of help to all healthcare professionals involved in the care of patients with astma and COPD.

Conflict of interest declaration – the ADMIT Working Group

The Aerosol Drug Management Improvement Team (ADMIT) is a consortium of European respiratory physicians with a common interest in promoting excellent delivery of inhaled drugs for asthma and COPD. It is supported by an unrestricted educational grant from MEDA AB. Members of ADMIT receive a small honorarium for attending meetings from MEDA AB and travel expenses are reimbursed.

Appendix
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Reference

1. Dekhuijzen PNR, Magnan A, Kneussl M on behalf of the ADMIT Working Group. The ADMIT series – Issues in Inhalation Therapy. 1) The goals of asthma treatment: can they be achieved? *Prim Care Resp J* 2007;**16**(6):341-8. doi:10.3132/pcrj.2007.00081

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