

## Editorial

# A children's asthma charter

The biennial Congress of the World Allergy Organization, Buenos Aires 6th–10th December 2009, was the venue for the World Allergy Day 2009 proclamation of the Asthmatic Children's Charter.

The Charter aims are that every asthmatic child should have the right to:

- 1 Be treated by a health professional with knowledge of allergic disease diagnosis and management;
- 2 Receive locally available pharmacotherapy in accordance with international best practice asthma treatment guidelines;
- 3 Be educated on how to take asthma treatment and how to avoid allergic triggers;
- 4 Enjoy school sports and play activities free from asthmatic symptoms.

We would add a further right to the Charter;

- 5 All children with asthma should live in a tobacco-smoke-free environment.

One might ask why we need such a Charter. There are now more than enough published guidelines on the management of childhood asthma. Indeed one of us, in the past, has posed the question whether we need more management guidelines (1). However, this charter focuses much more on the delivery of care. There remains a knowledge practice gap and indeed a guideline practice gap that must be addressed. We do not need more guidelines, but we most definitely need to improve their delivery. Hitherto most effort has been directed at children with asthma in developed countries, because of the higher prevalence of asthma in affluent communities. However, the need for a world-wide charter becomes ever more important as we are now witnessing rapidly increasing prevalence rates for asthma in developing countries.

The prevailing perspective is that asthma remains under-diagnosed and under-treated. However, a relatively recent prevalence survey

in the UK has shown that the rates of asthma diagnosis are almost identical to those for wheezing in the last year among 12 year olds. This is appreciably different to figures obtained in identical surveys in the 1970s and 1980s (2). There is an excessively frequent label of asthma in intermittent exclusive virus-induced wheezing in infancy often leading to inappropriate use of steroids while there is still under-diagnosis and poor management in children with established asthma. Asthma starts early in life with recurrent wheezing frequent in the first year of life. Phenotypes overlap in this age group, and pediatricians frequently prescribe controller asthma medication regardless of whether symptoms are troublesome or if there is a clear response to treatment (3).

It should be implicit in point (3) of the Charter that, firstly, where facilities are available, an accurate allergy diagnosis is made by skin and/or IgE antibody testing with expert interpretation of the results. Secondly, it is essential that parents/carers of a child with asthma be given advice on avoidance of triggers, including relevant allergens and pollutants. Education at an appropriate level must be provided both for the asthmatic child and for the adult who will help manage pharmacotherapy and implement allergen avoidance strategies. One component of diagnosis and assessment that is frequently under-employed is allergy testing. An allergy test will aid prognosis and therefore therapeutic decisions in infants at risk of asthma. It will identify avoidable triggers and, very importantly, will address parental concern and thereby improve trust and concordance with recommended therapy. Most parents are keen to identify triggers of their children's asthma. In the UK, primary care physicians and nurses will offer allergen avoidance advice although usually without doing any specific allergy tests first. Clearly, allergy tests are an essential pre-requisite before making any recommendations. Hospital health professionals in the UK tend not to immediately resort to allergy tests or to offer avoidance advice on the grounds

that the evidence base for allergen avoidance is weak, whereas pharmacotherapy is highly effective. It is clear that allergy testing would avoid the scenario outlined by a parent of an asthmatic child. 'The reluctance to carry out allergy tests is very annoying. We had an allergy test carried out in Germany. This allowed us to take steps to reduce his discomfort; he no longer takes any medications'. Environmental hygiene measures should be maintained to reduce clinical manifestations resulting from exposure to allergens in patients with rhinitis and asthma. The long-term challenge is to maintain family concordance to the recommendations given by the physician. A positive skin test to an allergen is perhaps a convincing way to increase concordance by providing a compelling visual image of the allergy.

Why should an allergist specifically be involved with the management of asthma if most agreed guidelines give scant attention to specific non-pharmacological-focused therapies such as avoidance and immunotherapy? Allergy is clearly not only a trigger for asthma exacerbation, particularly interacting with viral infection, but also the more severe the asthma the higher the probability of allergy being a significant contributor. The majority of patients with asthma experience rhinitis symptoms, and allergic rhinitis commonly precedes asthma exacerbation, increasing the risk of asthma attacks, emergency visits and hospital admissions for asthma. Sensitization to inhalant allergens is a risk factor for wheezing. Early onset allergy is a strong predictor of ongoing more severe and persistent disease. Furthermore, co-morbidity is very common although there is wide international variation in the prevalence of rhino-conjunctivitis among wheezing children. The UK ISAAC data from the 1990s indicated that among the 33.3% of 13–14 year olds who had wheezed in the last year, 14.4% (i.e., 43% of wheezers) have rhino-conjunctivitis, eczema or both as additional problems (4). On the other hand, in a Brazilian ISAAC center, the prevalence of wheezing in this age group was 18.9%, and 55.2% had rhinitis symptoms (5) An allergy service can provide a one-stop diagnosis and management strategy for all atopic disorders. This will hopefully avoid the cumulative adverse effects of topical steroids applied to skin, nose and lungs.

The Asthmatic Children's Charter emphasizes the importance of education in ensuring effective

delivery of care. An excellent controlled trial of educational seminars for pediatricians treating asthma demonstrated appreciable improvements in the pediatricians' performance in delivering written instructions which in turn reduced the frequency of admissions for acute asthma in the patients they treated. It was also associated with greater parental appreciation of the attentiveness, time devoted, and reinforcement provided, by the pediatrician (6). Thus, a major role for the World Allergy Organization, and also for the Paediatric Section of the European Academy of Allergy and Clinical Immunology and other regional Allergy and Clinical Immunology Societies, is to provide education for health professionals so that the aims of the Charter can be achieved.

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