

Editorial

Non pharmacological management of asthma: Little change in the evidence base over 5 yr

As I sit reviewing the evidence base for the non-pharmacological management of asthma for the latest update of the British Thoracic Society/Scottish Intercollegiate Guidelines Network (BTS/SIGN) asthma management guidelines, I sadly conclude that little has changed. Indeed, I doubt that there will be anything new to report in this section of asthma management. If anything, there will be a greater degree of negativity in relation to the strategies.

I suppose rather similar statements might be made about pharmacotherapy which as in all previous guidelines still concentrates on short acting beta agonists for rescue treatment and inhaled corticosteroids as prophylaxis. Long-acting beta agonists and leukotriene receptor antagonists have been around for sufficiently long for these to have appeared in previous published guidelines and for the moment none of the new biologicals have achieved a sufficient profile to be given anything other than a mention. However, there is at least promise for some of these new products to have a significant impact on asthma management in the future. One might even claim that anti-immunoglobulin E has already had an effect at the very severe end of the spectrum of disease.

The sad truth in relation to non-pharmacological therapy is that there is not even any promise of progress. All allergists would claim that allergen avoidance is a pivotal strategy. However, the evidence base from which to recommend avoidance of the most common aero-allergen, the house dust mite, was slim if not negative 5 years ago. If anything, more recent publications have confirmed that this strategy does not work. Despite all our assertions that avoidance of household pets if allergy is demonstrated is an important recommendation, there are no properly controlled studies that have demonstrated that this is in fact the case.

The alternative strategy recommended by many allergists is immunotherapy. While controlled trials of immunotherapy appear with considerable frequency, they have not appreciably changed the overall perception of the treatment. It is clear that immunotherapy for house dust mite, grass pollen, tree pollen, cat and dog and maybe alternaria mould will improve asthma associated with these allergies with significant benefit compared with placebo in relation to symptoms, medication requirements and bronchial hyperresponsiveness. The key issue always raised in guidelines is how does this effect compare on a risk/benefit analysis with conventional pharmacotherapy. Here,

data are totally lacking as there are no good controlled comparative studies. Until these are performed, I suspect that guidelines will not change despite our belief that immunotherapy will have more long-lasting effects than pharmacotherapy and may actually be the one treatment that modifies the natural history of the disease. Sadly, at the moment, these assertions are based on the limited data.

Other important components of the non-pharmacological approach to asthma management include attending to psycho-social issues. Limited studies have suggested that various psychotherapeutic manoeuvres are useful adjuncts to conventional treatment but again more trials are required to reinforce any recommendations. Avoidance of non-specific triggers such as cigarette smoke and environmental pollutants is also recommended on the basis of expert opinion rather than good control trial evidence of benefit.

Despite an enormous number of studies reviewing a range of components of the diet and the way in which they impact on asthma, there is really no evidence that any dietary manipulation has any significant impact on the disease. It is for instance interesting that reinforcing the diet with fish oils (omega-3 polyunsaturated fatty acids) has a significant impact on immunological profiles, but there is no evidence that it actually benefits the disease. The same so far is true of other dietary modifications. Again more good control trials are required to investigate whether reinforcing antioxidants such as with selenium or reducing salt intake really are of value.

Finally, there are a host of complementary therapies much favoured by significant sections of our populations which are heavily promoted in the media despite a total absence of any support for their use. Indeed in many cases, there is clear evidence that they have no value. Thus here again the statements in the updated guidelines will not change.

My overwhelming feeling having participated in this exercise for several years is that we must all make greater efforts to generate data to substantiate our heart-felt belief that non-pharmacological approaches to the management of asthma will constitute the major component of strategies to improve long-term outcomes in patients with asthma.

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