

Editorial

Anaphylaxis; the latest allergy epidemic

While referrals to allergy clinics in previous decades have predominantly consisted of children with allergic rhinitis, asthma and eczema, the proportion presenting with acute severe allergic reactions has progressively increased. Now my own clinic is dominated by acute food, insect venom and drug allergy. However, it is remarkably difficult to get accurate figures of exactly how much of a problem anaphylaxis has become. The main difficulties arise around a lack of agreed definition for what constitutes an anaphylactic reaction. Most would consider that it involves respiratory difficulty with or without hypotension associated with fainting, collapse or unconsciousness. However, this then excludes patients who have developed angioedema and urticaria which is appropriately treated prior to its evolution into a more severe and potentially life-threatening reaction. Conversely, if patients presenting just with angioedema and urticaria are incorporated into the definition, then this will include many individuals who will not have any progression of symptoms and may actually have developed the problem as a consequence of a preceding infection or a response to a physical factor such as exercise, cold, heat or sun exposure.

Notwithstanding these issues, there is evidence that the problem is increasing. Certainly, the percentage of Accident and Emergency Unit attenders that have acute allergic reactions has increased appreciably in the last 10 yr (1). Indeed, in the UK admission rates have increased between 1991 and 2004 for anaphylaxis, acute food allergy and urticaria (2). It is interesting that this increase in hospital admissions for acute allergic conditions has occurred at a time when admission rates for asthma are diminishing (3). We could therefore conclude that the asthma epidemic is over and perhaps our current strategies in management are beginning to work. Now, we should focus far greater attention on anaphylaxis and food allergy. Indeed the European Academy of Allergy and Clinical Immunology have recognized that a greater focus on

these subjects is required. As a consequence an additional group has been established within GALEN to address this area. It has been given the acronym GAIN, standing for Galen Anaphylaxis INitiative. Furthermore, this problem has also been highlighted by the American Academy of Asthma, Allergy and Immunology (4).

We, also have published on the problems that arise in children with anaphylaxis. This is very much focused on qualitative issues. Thus, it is clear that quality of life is worse for peanut allergic children than those with insulin dependent diabetes mellitus (5). While adrenalin (epinephrine) remains the one effective treatment for acute severe reactions its employment is very variable both in terms of prescribing and the frequency with which it is used by patients and their carers during a reaction. Much of this relates to confused messages about the need for such treatment at a professional level and grossly inadequate training and education for patients and carers. A recent review from France highlights the variability of parental knowledge in the use of auto-injectors (6). We have also published another study from Manchester, UK which very much replicated the French findings and also showed that a consultation with an allergy specialist rather than a general paediatrician considerably improved the competency of parents in being able to use an autoinjector device (7).

It is therefore critically important that all patients that have acute and potentially life-threatening allergic reactions are referred to a specialist allergy service. This will ensure that the causes are identified, comorbidities appropriately treated, a risk assessment performed and a personalised management plan developed, to reduce the potential for accidental exposures and to ensure that appropriate medications are available and can be employed with confidence by sufferers and their carers. This is not the case at present for many patients in many countries. It may be construed as negligence on the part of

Editorial

government and society that this is the case and must be urgently addressed at all levels. There is a desperate need for allergy services to be given a high priority at government level (8), but also must be addressed by individual hospitals and the clinical staff working within them.

J. O. Warner

*Professor of Paediatrics and Head of Department,
Room 246, Imperial College London,
Norfolk Place, London W2 1PG, UK*

References

1. MONERET-VAUTRIN DA, MORISSET M, FLABBE J, BEAUDOUIN E, KANNY G. Epidemiology of life-threatening and lethal anaphylaxis: a review. *Allergy* 2005; 60: 443–51.
2. GUPTA R, SHEIKH A, STRACHAN DP, ANDERSON HR. Time trends in allergic disorders in the UK. *Thorax* 2007; 62: 91–6.
3. ROSS ANDERSON H, GUPTA R, STRACHAN DP, LIMB ES. Fifty years of asthma: UK trends from 1955–2004. *Thorax* 2007; 62: 85–90.
4. SIMONS FE. Anaphylaxis, killer allergy: long-term management in the community. *J Allergy Clin Immunol* 2006; 117: 367–77.
5. AVERY NJ, KING RM, KNIGHT S, HOURIHANE JO. Assessment of quality of life in children with peanut allergy. *Pediatr Allergy Immunol* 2003; 14: 378–82.
6. POUESSEL G, DESCHILDRE A, CASTELAIN C, SARDET A, SAGOT-BEVENOT S, DE SAUVE-BOEUF A. Parental knowledge and use of epinephrine auto-injector for children with food allergy. *Pediatr Allergy Immunol* 2006; 17: 221–6.
7. ARKWRIGHT PD, FARRAGHER AJ. Factors determining the ability of parents to effectively administer intramuscular adrenaline to food allergic children. *Pediatr Allergy Immunol* 2006; 17: 227–9.
8. WARNER JO. All talk and no action. *Pediatr Allergy Immunol* 2006; 17: 553–4.