



Sue Clarke
Specialist Allergy Health Visitor and Nurse Advisor to the
Anaphylaxis Campaign

Management and risk reduction of severe allergies in relation to asthma




We will be covering...

- Why asthma makes severe allergies more dangerous and vice versa
- Identifying the high risk patients
- The role of Primary care
- Long term management of severe allergy and asthma
- Resources




National review of asthma deaths

- Royal College of Physicians (2014)
- Of the 195 patients whose data was analysed 41% had a history of allergy
- Factors known to trigger their asthma
 - Food allergy – 6 patients
 - Animal allergy – 13 patients
 - Hay fever/AR - 52 patients
- **Clinicians did not recognise high risk status**
- **49% of people who died had never had their triggers recorded.**




Link between asthma and food allergy

- Sampson H A, Mendelson L and Rosen J P Fatal and near fatal reactions to food in children and adolescents *NEJM* 1992; 327: 380-4.
- Roberts G, Lack G (2003) Food allergy and asthma – what is the link? *Paediatric Respir Review*; 4:205-212.
- Roberts G, Patel N, Levi-Scaffer F, Habibi P, Lack G (2003) Food allergy as a risk factor for life threatening asthma in childhood: a case controlled study. *J.Allergy and Clin Immunol*; 112:168-74.
- Uguz A, Lack G, Pumphrey R, Ewan P, Warner J, Dick J, Briggs D, Clarke S, Reading D, Hourihane J. (2005) Allergic reactions in the community: a questionnaire survey of members of the anaphylaxis campaign *Clin Exp Allergy*. 35:746–750



High risk groups

- Significant asthma alongside food allergy
- Allergic reactions to traces amounts of an allergen
- Previous severe allergic reaction
- Previous hospital admission for asthma
- Underlying genetic tendency to angioedema (HAE)



High risk groups

- Peanut and nut allergies
- Non compliance with steroid therapy and overuse of short acting beta-2 agonists
- Food allergy induced asthma
- Psychological problems alongside asthma and allergies
- Teenagers!
- Pumphrey R (2004)Anaphylaxis: can we tell who is at risk of a fatal reaction? *Curr Opin Allergy Clin Immunol*;4(4)

Allergies in schools

- 24% of allergic reactions occur on school grounds
- 82% of reactions happen in school age children
- 61% of schools have at least one child at risk of anaphylaxis
- 95% of children allergic to peanut also have asthma
- 15% of 13-14yr olds have a diagnosis of 2 or more allergic diseases.



- Muraro et al (2010) The management of the allergic child at school.

Role of primary care?



- Refer to Allergy clinic
- Interim management
- Manage other allergies optimally
- Prescriptions
- Long term management

Role of Primary care?

- Ensure that an allergy focussed clinical history has been taken if there are IgE food allergy symptoms - ensure confirmed by SPT or SIgE blood test.



- NICE CG116 (2011)

Role of Primary care

- **Asthma reviews**
- Should always include questioning about allergy and other triggers, ask open questions
- **Record it**
- Update management plans
- Reinforce key educational messages, check AAI technique
- Hay fever and allergic rhinitis management

Rhinitis and asthma

- 78% of asthma patients have symptoms of rhinitis (compared to 10%-30% in the general population)
- Treatment of allergic rhinitis, either with anti-histamines or intranasal corticosteroids has been shown to improve asthma symptoms


Consider.....

- Allergic rhinitis is a risk factor for asthma
- Allergic rhinitis increases the risk of asthma attacks
- Allergic rhinitis doubles the risk of A/E visits in patients with asthma
- Allergic rhinitis increases the number of prescriptions for rescue therapy (SABA) in patients with asthma
- Allergic rhinitis increases the odds of hospitalisation for asthma

Price DB et al. Impact of Concomitant Allergic Rhinitis on Asthma-related


Rhinitis treatment

- Topical corticosteroids
- Non-sedating antihistamines
- Anti-leukotrienes
- Do not forget allergen avoidance
- Management plan



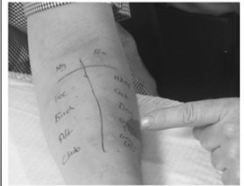
Repeat Prescriptions

- Check the weight in children
- Ensure the prescription is for the device that the patient and carers are familiar with
- Use this as an opportunity to reinforce training
- Please ask your GPs not to prescribe generically



Referral to an allergy clinic

- Allergy focussed clinical history
- Specific allergy tests (skin prick test or blood tests)
- A diagnosis
- Risk assessment of future reactions




Common causes of severe allergy

- Food - especially peanuts, nuts, eggs, cows milk, shellfish & certain fruits, soya, sesame, gluten.
- Drugs - e.g. antibiotics, aspirin, NSAIDs & vaccines
- Insect stings - bees & wasps
- Latex - which can be found in a large variety of products
- Idiopathic – unknown cause



Managing severe allergy

- Steep learning curve!
- Allergen avoidance
- Early recognition of symptoms
- Crisis management




Food labelling

- EU/2003 Food labelling laws
- 14 foods have to be listed: Milk, egg, peanut, tree nut, sesame, soya, fish, crustaceans, celery, mustard, gluten, and sulphites (at more than 10 parts per million) and then Mollusc and Lupin were added
- Kiwi?

INGREDIENTS
Water, Carrots, Onions, Red Lentils (4.5%) Potatoes, Cauliflower, Leeks, Peas, Cornflower, Wheat flour, Cream (milk), Yeast Extract, Concentrated Tomato Paste, Garlic, Sugar, Celery Seed, Sunflower Oil, Herb and Spice, White Pepper, Parsley
ALLERGY ADVICE
For allergens, see ingredients in bold


...and drinks?

- Did you know that milk, egg, and fish products can be used to clarify wines and champagne?
- Unpackaged foods or foods wrapped on site will need to declare the big 14.
- Restaurants, Hotels, Hospitals, Cafes etc.





Shopping perils

- Cross contamination
- 'May contain' labelling
- Not just in foods
- Manufacturing mistakes
- Assumptions




Unexpected allergens

- Most condoms use milk to lubricate the machines during manufacture?
- Milk in washing up liquid?(Ecover)
- Milk found in clothing?(Uniqlo)
- Body butters often contain shea, cocoa, coconut and almond oil.


EpiPen

- Adult dose 0.3mgs
- Child 0.15mgs
- 18 month shelf life
- www.epipen.co.uk
- Expiry alert service



Jext

- Adult dose 0.3mgs
- Junior dose 0.15mgs
- 18 month shelf life
- www.jext.co.uk
- Expiry alert service



Emerade ®

- Emerade 500
- Emerade 300
- Emerade 150
- Longer needle
- 30 month shelf life
- www.emerade.com
- Expiry alert service



Carrying an injector

- Suitable carrying case
- Always accessible
- Know the limitations of the device
- Wear medical identification



Obesity and auto-injectors



- Needle sizes
- Males versus females
- IM versus SC

T.Song et al 2005

Fatal Posture in Anaphylaxis



- Lay the patient down.
- Breathing difficulties?
- Empty ventricle syndrome.

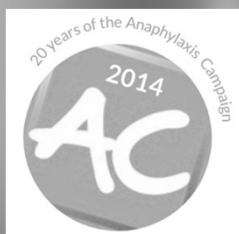
Pumphrey R. 2003

Resources

- NICE CG 116 (Feb2011)
- NICE CG134 Anaphylaxis (Dec 2011)
- RCPCH Care pathway for Food allergy and anaphylaxis asthma, allergic rhinitis (Feb 2011)
- Resuscitation Council Guidelines (2008)
- BSACI www.bsaci.org.uk
- [CKS.NICE.org.uk/asthma or allergic rhinitis](http://CKS.NICE.org.uk/asthma%20or%20allergic%20rhinitis)
- [CKS/NICE.org.uk/angio-oedema and anaphylaxis](http://CKS/NICE.org.uk/angio-oedema%20and%20anaphylaxis)
- BTS/SIGN guidelines on Asthma 2014

Membership


- **Membership organisation**
- Individual
- Healthcare professionals
- Corporate



Anaphylaxis Campaign




- AllergyWise on-line training programmes
- Healthcare professionals/trainers
- Family and carers
- GP and Practice Nurses
- www.anaphylaxis.org.uk
- Pharmacy training



Conclusions

- Education is the key!
- Well controlled asthma and allergies
- Record all triggers in the patients notes
- Peanut and nut allergies are dangerous even if mild!



Thank you
Sue.clarke@anaphylaxis.org.uk