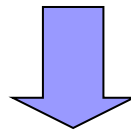


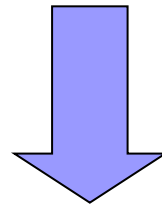
From primary to tertiary care for GI allergy

Dr Warren Hyer
Consultant Paediatrician
Consultant Paediatric Gastroenterologist
Northwick Park and St Mark's Hospital



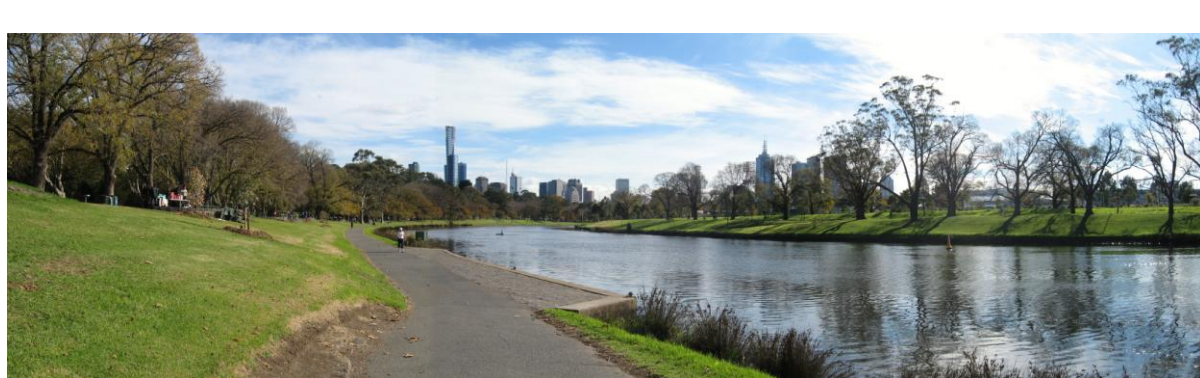


Northwick Park and St Mark's Hospitals

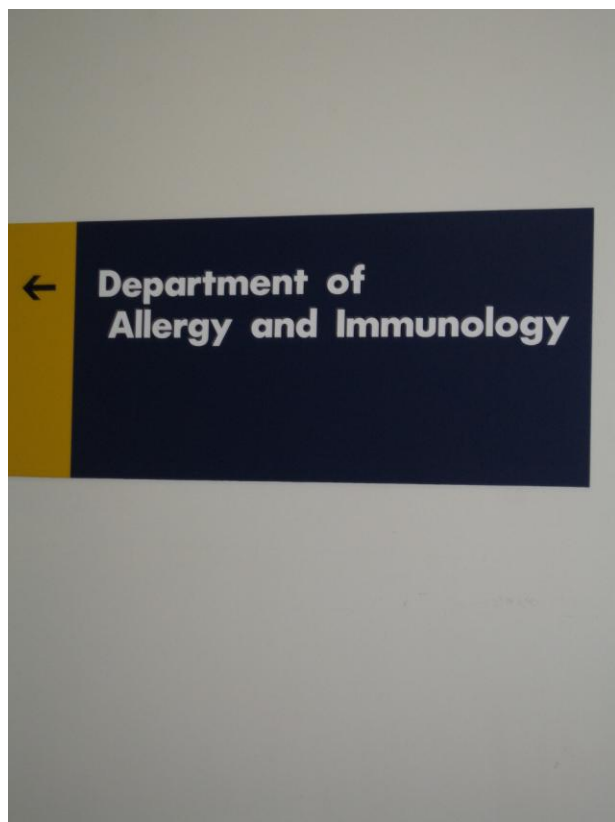


Department of Paediatric gastroenterology, CWH

Translating tertiary care to primary care



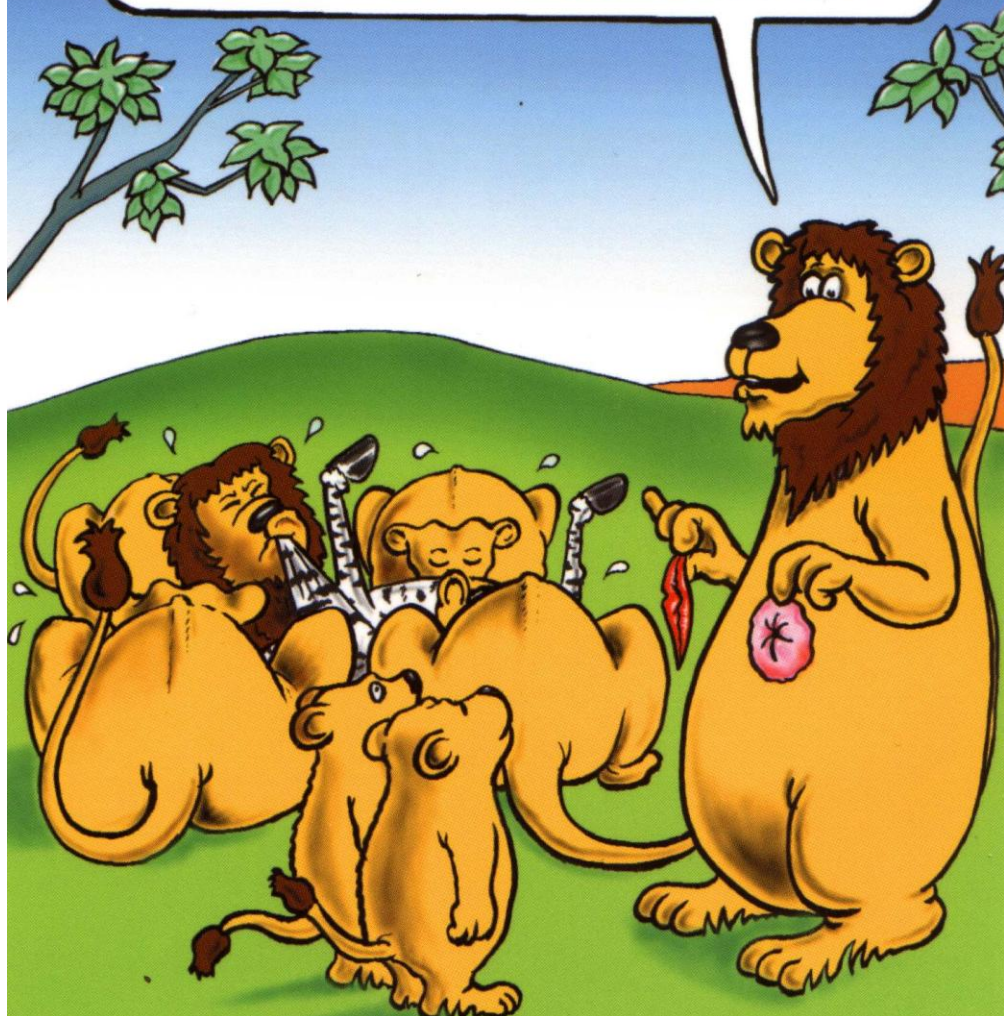
This is an extreme way of experiencing another unit.....



Box 1: Unified paediatric diagnostic and therapeutic approach

- (1) Medical history (e.g. symptoms of skin, gastrointestinal tract, and/or respiratory system)
- (2) Dietary history (e.g. early feeding, current dietary intake, previous intolerance reactions, eliminated foods)
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- (8) Therapeutic specific elimination diet (under supervision of dietician, energy and micronutrient supplementation)
- (9) Experimental approach: (e.g. specific oral tolerance induction, immune modulating agents, anti-IgE therapy)

REMEMBER KIDS - THE TWO THINGS WE NEVER EAT ARE THE LIPS AND THE ARSEHOLES - THEY GET SENT TO THE FAST FOOD RESTAURANTS.



But 40% of my follow ups in my GI clinic were food mediated disease





HOUSE OF LORDS

INFORMATION

In a report published today the House of Lords Science and Technology Committee argues that allergy in the UK is reaching epidemic proportions and the Government must now recognise the severity of the problem and take concrete steps to tackle it. A lack of specialist clinics, and minimal allergy training within medical curricula, mean that services for allergy patients in the UK lag far behind those of many other Western European countries.

History

A NOTE ON FOOD ALLERGY

BY

A. M. KENNEDY, M.D., M.R.C.P.

PROFESSOR OF MEDICINE, UNIVERSITY OF WALES, AND DIRECTOR
OF THE MEDICAL UNIT, WELSH NATIONAL SCHOOL OF
MEDICINE, CARDIFF

DIAGNOSIS AND TREATMENT

In the diagnosis of a case of food allergy the history is of the greatest importance. Careful inquiry into each attack is essential, and all varieties of food taken at every meal must be reviewed and their relation to attacks or the absence of attacks noted. A previous history in the

June 25, 1932]

FOOD ALLERGY

[THE BRITISH
MEDICAL JOURNAL 1167



LEADING ARTICLE

Allergy

Who should manage infants and young children with food induced symptoms?

B Niggemann, R G Heine

A proposal for a unified, interdisciplinary approach

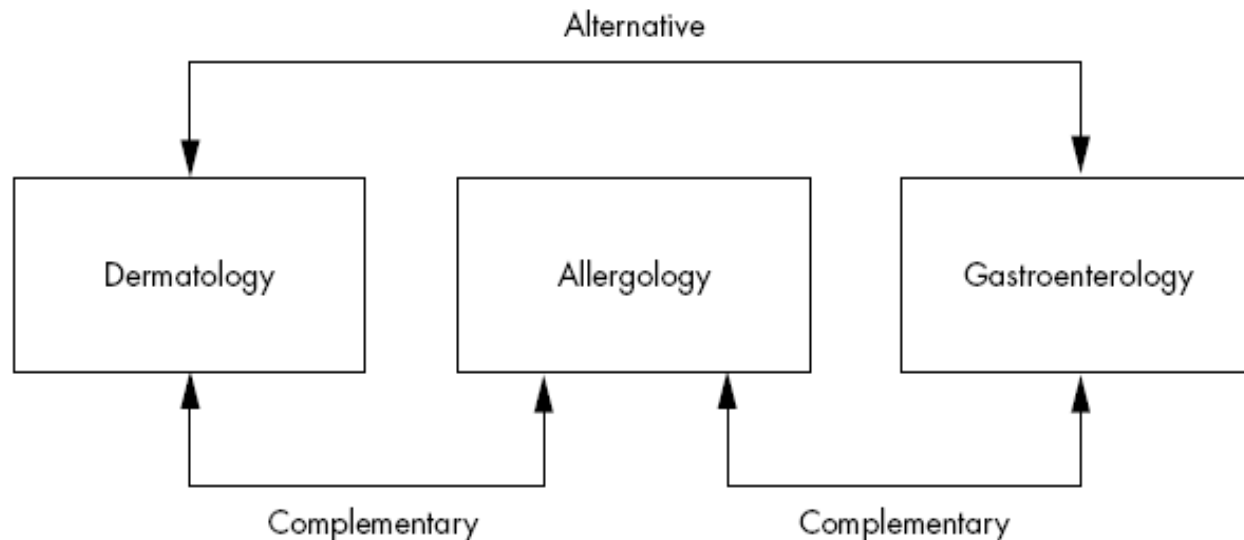
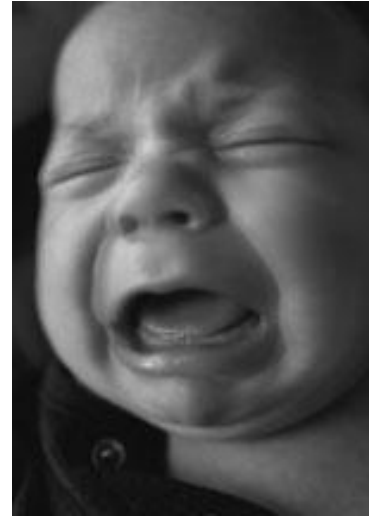


Table 1 Current referral patterns to the three professions concerning food related symptoms

	Dermatologist	Allergologist	Gastroenterologist
Predominant symptoms seen in patients	Atopic eczema Urticaria	IgE mediated reactions Allergic rhinoconjunctivitis Allergic bronchial asthma	Persistent vomiting Persistent diarrhoea Failure to thrive
Suspected underlying pathomechanism	Immediate or delayed type hypersensitivity	IgE mediated hypersensitivity	Non-IgE mediated food hypersensitivity
Preferred investigations	Skin testing	Specific serum IgE antibodies (CAP system FEIA) Skin prick test Atopy patch test Oral food challenges	Growth charts Stool microscopy/culture Endoscopy and biopsies Coeliac serology Serum micronutrient levels
Main therapeutic approaches	Emollients Topical anti-inflammatory agents Empirical diet	Elimination diet Adrenaline autoinjector Pharmacotherapy	Elimination diet Dietary supplementation



Breastfeeding benefits - how many can you point to?

- Protection against diarrhoea, gastro-enteritis and tummy upsets
- Lower risk of diabetes
- Protection against ear infections
- Less likelihood of cot death
- Protection against chest infections and wheezing
- Better mental development
- Less smelly nappies
- Better mouth formation and straighter teeth
- Cheaper than bottle feeding
- Less eczema
- Stronger bones in later life
- Lower risk of pre-menopausal breast cancer
- Faster return to pre-pregnancy figure
- Lower risk of ovarian cancer

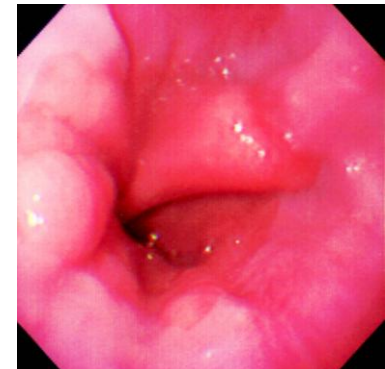
Breastfeeding gives babies the best start in life and also protects the mother's health. With proper advice and support, almost all mothers can breastfeed their babies. The Baby Friendly Initiative is working to ensure that the health services provide this support.

Is your hospital Baby Friendly?

UK Baby Friendly Initiative
20 Guilford Street
London WC1N 8EJ

unicef

ROBINSON HEALTHCARE
Robinson Healthcare supporting the UK Baby Friendly Initiative.



Guidelines for the diagnosis and management of cow's milk protein allergy in infants

Yvan Vandenas, Martin Brueton, Christophe Dupont, David Hill, Erika Isolauri, Sibylle Koletzko, Arnold P Oranje and Annamaria Staiano

Arch. Dis. Child. 2007;92;902-908
doi:10.1136/adc.2006.110999

Suspicion of cows' milk protein allergy (CMPA)

Suspicion of mild to moderate CMPA
One or more of the following symptoms:

- Gastrointestinal: frequent regurgitation, vomiting, diarrhoea, constipation (with/without perianal rash), blood in stool, iron deficiency anaemia
- Dermatological: atopic dermatitis
- General: persistent distress or colic (≥ 3 h per day wailing/irritable) at least 3 days/week over a period of >3 weeks
- Others (rare)

Clinical assessment

- Clinical findings
- Family history (risk factor)

Suspicion of severe CMPA
One or more of the following symptoms:

- Gastrointestinal: failure to thrive because of diarrhoea or regurgitation/ vomiting; refusal to feed, moderate to large amounts of blood in stool with decreased haemoglobin; protein-losing enteropathy
- Dermatological: failure to thrive and severe atopic dermatitis

Continue breastfeeding
Elimination diet in mother, no CMP for 2 weeks (or up to 4 weeks in case of atopic eczema or allergic colitis) plus Ca supplement, and no egg

Improvement

No improvement

Reintroduce CMP

Resume normal diet in mother and/or consider other (allergic) diagnosis*

Symptoms
Maintain elimination diet in mother (plus Ca supplement)

No symptoms
Reintroduce egg and monitor

Referral to paediatric specialist for diagnosis and treatment, and in the mean time: elimination diet in mother (no CMP) plus Ca supplement

*Breastfeeding can be continued, topical treatment in case of atopic dermatitis

eHF after breastfeeding, solid foods free of CMP until 9–12 months of age, and for at least 6 months

Figure 1 Algorithm for the diagnosis and management of cow's milk protein allergy (CMPA) in exclusively breast-fed infants. eHF, extensively hydrolysed formula.

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

CLINICAL REPORT

Effects of Early Nutritional Interventions on the Development of Atopic Disease in Infants and Children: The Role of Maternal Dietary Restriction, Breastfeeding, Timing of Introduction of Complementary Foods, and Hydrolyzed Formulas

Guidance for the Clinician in Rendering
Pediatric Care

Frank R. Greer, MD, Scott H. Sicherer, MD, A. Wesley Burks, MD, and the Committee on Nutrition and Section on Allergy and Immunology



Royal Children's Hospital
Melbourne



ST MARK'S
HOSPITAL

The North West London Hospitals **NHS**

NHS Trust

Box 1: Unified paediatric diagnostic and therapeutic approach

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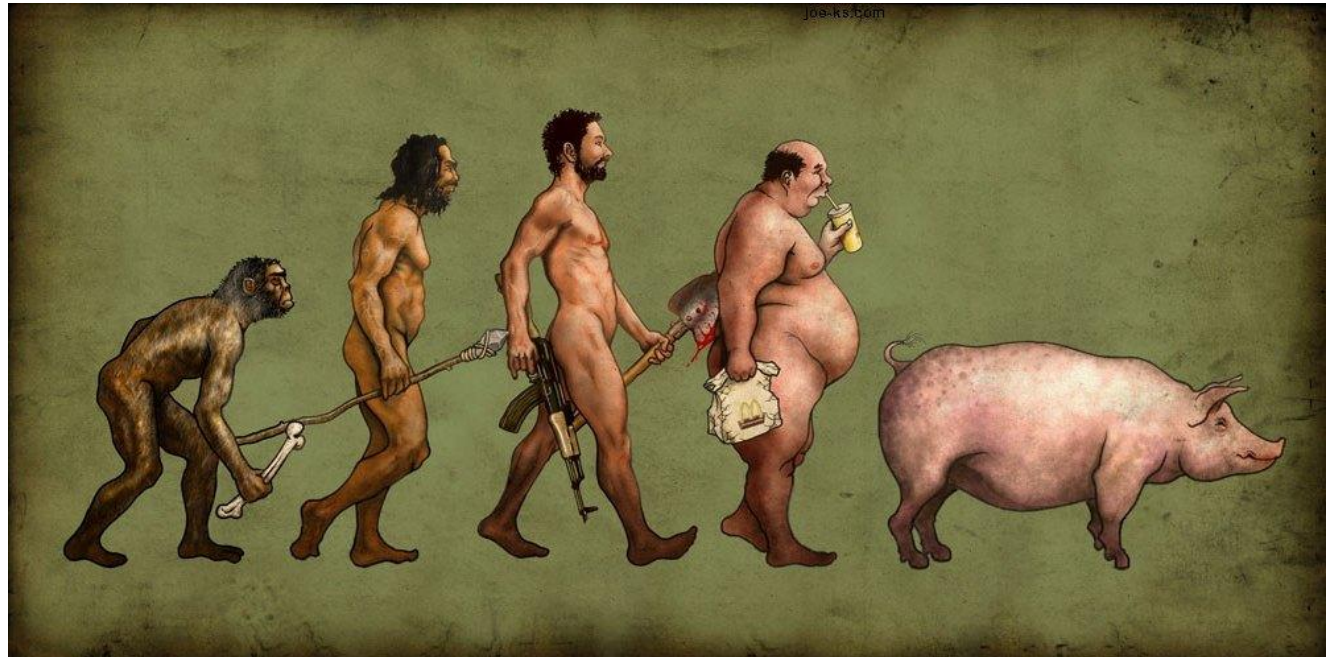


Conclusion 1

History is the most important aspect of the history. This can be achieved even in a car park.

It was clear that an “organ specific clinic” was an outmoded approach

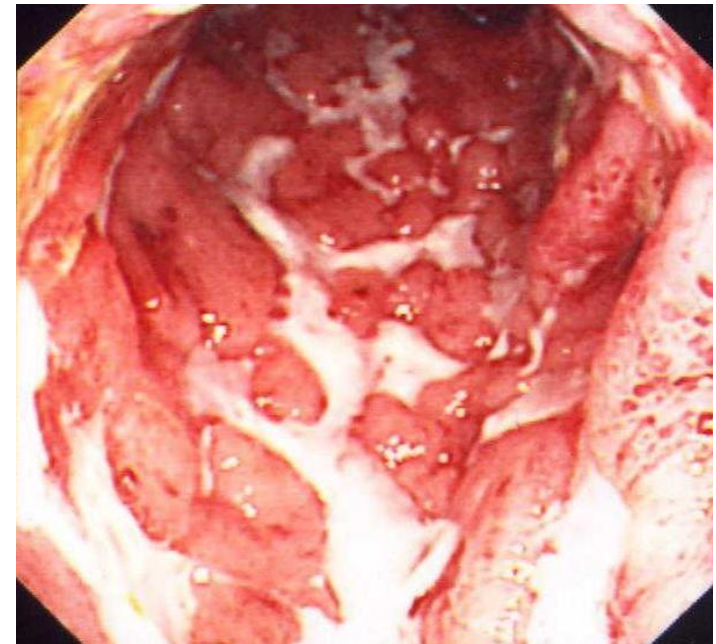
- Time to evolve:



Do you need funding ?

- This clinical service was designed to move children out of an organ specific clinical service to an atopic service
- The aim was to reduce the burden in other clinical areas

Answer: No, although it would be appreciated!



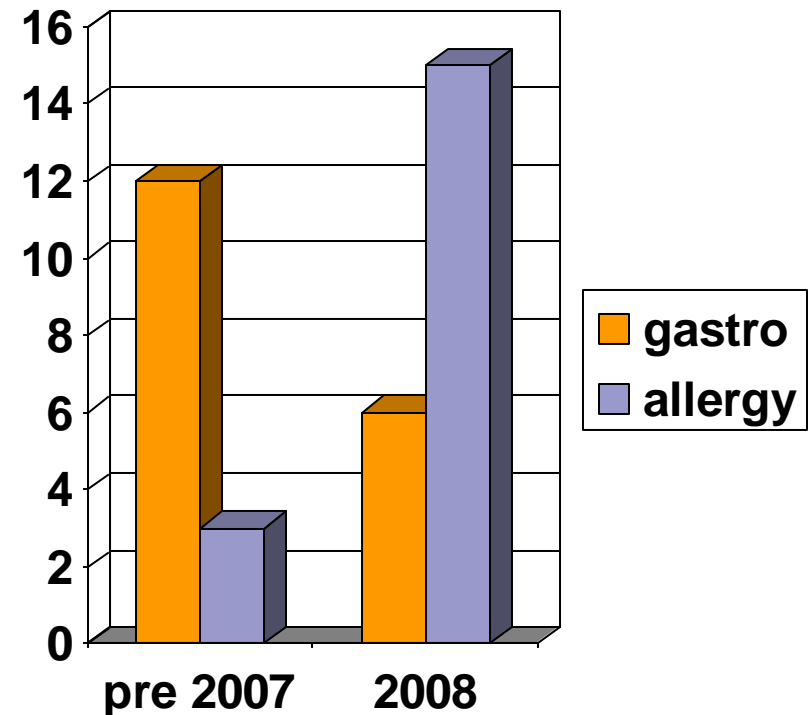
Who was going to be referred

- Food allergy
- Failure to thrive
- Immediate or delayed food reactions
- Infantile eczema
- Sideways referral for respiratory clinic (next door)



What impact does this have on other clinics

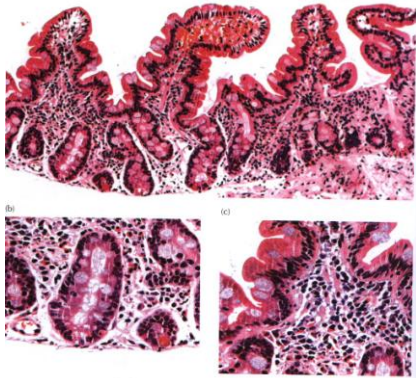
- Emptied out my gastro clinic
- Moved all the IgE immediate into a single clinic
- Struggle to meet the 18 week wait



What is the effect on patient care?

- To see the infantile eczema in < 3 weeks
- Early introduction of hydrolysate feeds
- Prevents disparity in care between consultants
- A uniform approach to:
 - Epipens
 - Rectal bleeding
 - Use of nutrition in childhood eczema
 - Early recognition of enteropathy from infant formulae
 - Strategies in allergy prevention

What changes have been introduced into patient care?



Breastfeeding benefits - how many can you point to?

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- Lower risk of diabetes
- Protection against ear infections
- Less likelihood of cot death
- Protection against chest infections and wheezing
- Better mental development
- Less smelly nappies
- Better mouth formation and straighter teeth
- Cheaper than bottle feeding
- Less eczema
- Stronger bones in later life
- Lower risk of pre-menopausal breast cancer
- Faster return to pre-pregnancy figure
- Lower risk of ovarian cancer



Breastfeeding gives babies the best start in life and also protects the mother's health. With proper advice and support, almost all mothers can breastfeed their babies. The Baby Friendly Initiative is working to ensure that the health services provide this support.

Is your hospital Baby Friendly?



UK Baby Friendly Initiative
20 Guilford Street
London WC1N 1DZ



Health and social benefits associated with breastfeeding including the above points have been proved or supported by research. References are available on request. The Baby Friendly Initiative is part of a global campaign by the World Health Organisation and UNICEF. It is a programme of the UK Committee for UNICEF (Registered Charity No. 207595). The leaflet is produced by UNICEF Enterprises Ltd, a company which converts to pay all its net profits to UNICEF.

ROBINSON HEALTHCARE

Robinson Healthcare: supporting the UK Baby Friendly Initiative.

Example - Infantile colic – evidence to practice

- Should she carry the child more?
 - One RCT (66 infants) – no difference
- Should she reduce stimulation
 - One RCT (42 infants)- beneficial effect
- Cranial osteopathy
 - No data
- Crib vibrator/ car ride stimulation/infant massage
 - One RCT – no difference
- Simethicone (infacol) vs placebo
 - 3 RCT's – no good evidence, and not likely to be new evidence forthcoming
- Caesin hydrolysate
 - Anecdotally, very effective for select cases
 - But who will benefit? – those from atopic families
 - RCT 122 infants, active diet (low allergic) had a beneficial effect on crying

GER

CMA

DYSPHAGIA
HAEMATEMESIS
MELENA
RUMINATION
NAUSEA/BELCHING
ARCHING
BRADYCARDIA
HICCUPS
SANDIFER'S SYNDROME
ASPIRATION
LARINGITIS/STRIDOR
RESPIRATORY INFECTIONS
HOARSENESS

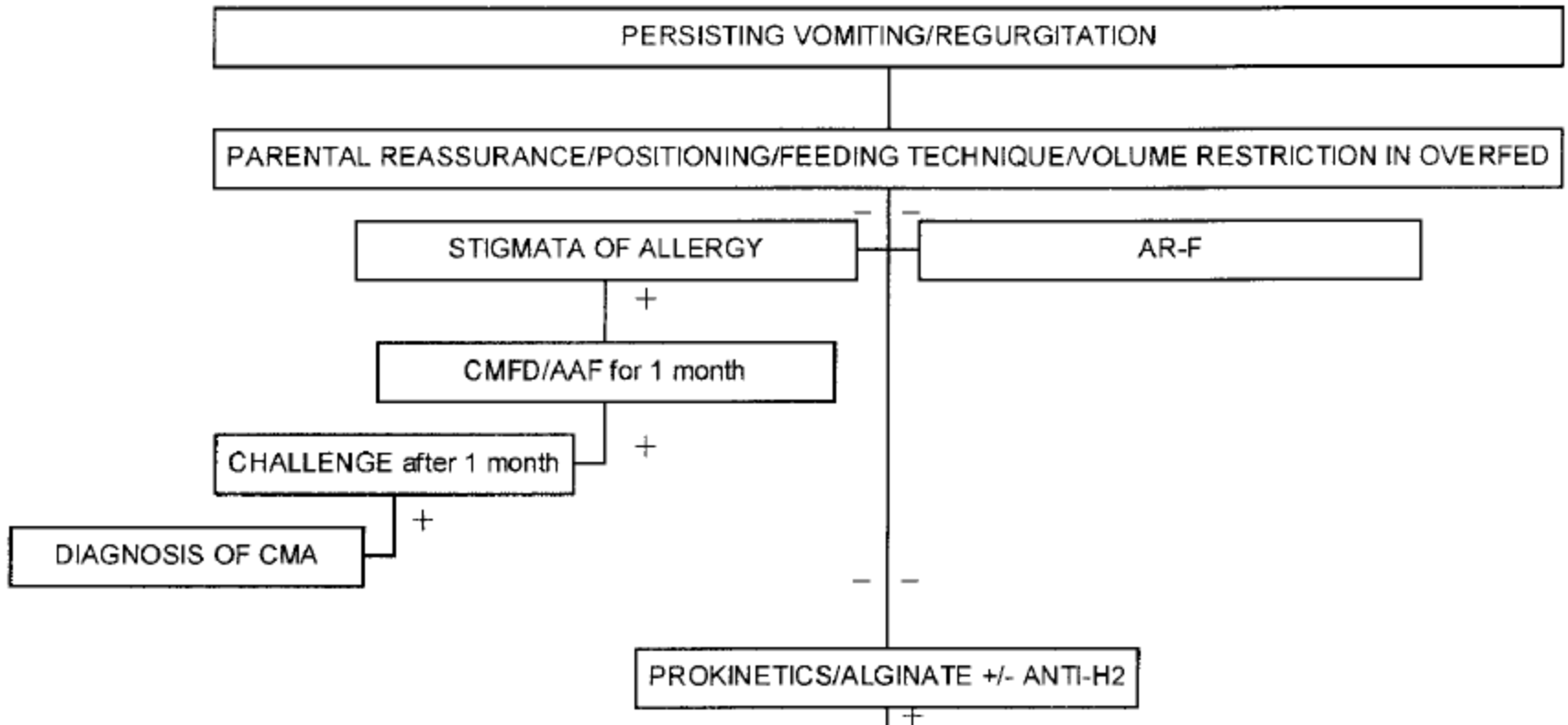
CRYING
IRRITABILITY
COLIC
PARENTAL ANXIETY
FEEDING REFUSAL
FAILURE TO THRIVE
VOMITING
REGURGITATION
SIDEROPENIC ANAEMIA
WHEEZING
APNEA/ALTE/SIDS
SLEEP DISTURBANCES

DIARRHEA
BLOODY STOOLS
RHINITIS
NASAL CONGESTION
ANAPHYLAXIS
CONSTIPATION
ECZEMA/DERMATITIS
ANGIOEDEMA
LIP SWELLING
URTICARIA/ITCHING

REVIEW ARTICLE

Gastroesophageal Reflux and Cow Milk Allergy: Is There a Link?

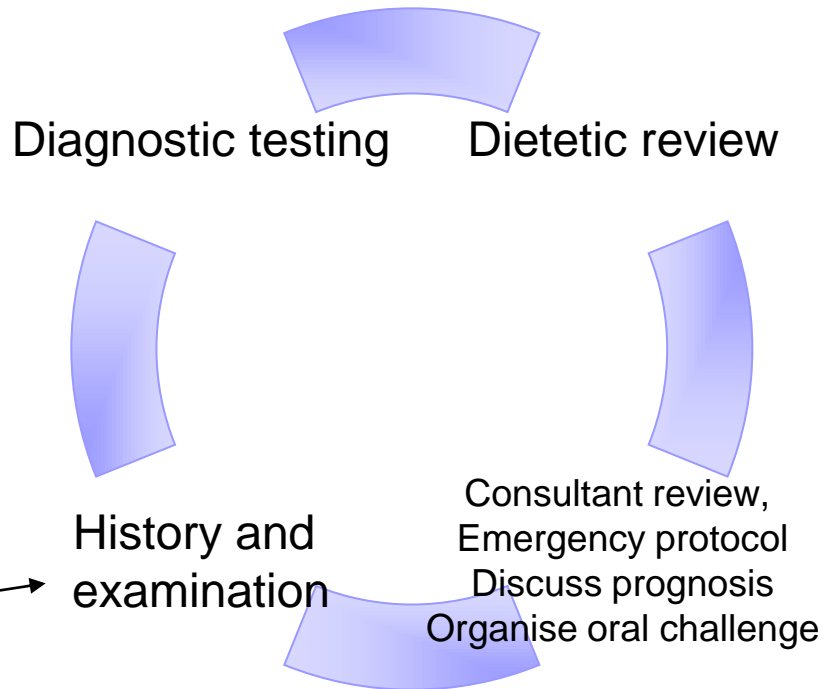
Silvia Salvatore, MD*, and Yvan Vandenplas, MD, PhD‡



Reduction in investigations

- Over 25% of referrals after consultation are not related to food allergy and thus the clinic has prevented unnecessary food avoidance
- Urticaria
- Preventing IgE mediated testing in non IgE mediated disease

The one stop clinic – theory to practice



Outpatient experience= 1 hours



Who do you need in a clinic

- You
- A dietician
- Access to respiratory or GI interest
- Skin prick testing
- Blood testing (CAP FEIA)
- Oral challenge facilities (not same day)
- A PC with colour printer

Can this be found in a polyclinic?

- You ✨
- A dietician – elimination diets ✨
- Access to respiratory or GI interest
- Skin prick testing ✨
- Blood testing (CAP FEIA) ✨
- Oral challenge facilities (not same day) ✨
- A PC with colour printer ✨

You must spend time learning how to interpret the tests

Hill DJ, Heine RG, Hosking CS. The diagnostic value of skin prick testing in children with food allergy. Paed Allergy Immunol 2004;15:435-441

Food item	Weal diameter (mm)	Sensitivity	Specificity	Positive predictive value
Cow's milk	0	0.11	0.36	0.15
	≥3	0.79	0.73	0.75
	≥6	0.49	0.95	0.91
	≥8	0.30	1.00	1.00
Egg	0	0.05	0.83	0.60
	≥3	0.87	0.67	0.93
	≥6	0.68	0.92	0.98
	≥7	0.52	1.00	1.00
Peanut	0	0.04	0.50	0.18
	≥3	0.95	0.72	0.91
	≥6	0.78	0.94	0.98
	≥8	0.51	1.00	1.00

Sampson HA. Utility of food-specific IgE concentrations in predicting symptomatic food allergy. J Allergy Clin Immunol 2001 ;107: 891-96

'Decision point' Allergen	[kUA/l]	sensitivity	specificity	PPV
Egg	7	61	95	98
Milk	15	57	94	95
Peanut	14	57	100	100
Fish	3	63	91	56
Soybean	30	44	94	73
Wheat	26	61	92	74

Who should do you skin prick tests?



To start with,
perhaps it should be you....

Role of dietician

- If the principle treatment modality is avoidance, then the dietician is the therapeutic tool!
- Dieticians can see and review patients of their choice and fit into the allergy clinics as required.

A managed approach to allergy care – reduction in accidental exposure

Clin Exp Allergy 2005; 35:751–756

doi:10.1111/j.1365-2222.2005.02266.x

Efficacy of a management plan based on severity assessment in longitudinal and case-controlled studies of 747 children with nut allergy: proposal for good practice

P. W. Ewan and A. T. Clark

Department of Allergy, Addenbrookes NHS Trust, University of Cambridge Clinical School, Cambridge, UK



Creating emergency protocols:

Microsoft Excel - emergency patient plans nph

File Edit View Insert Format Tools Data Window Help

Type a question for help

Arial 10 B I U

K68 Not provided

	B	C	D	E	F	G
1	DOB	Known allergy 1	Known allergy 2	Known allergy/tolerances	Parent name	Parent number 1
2	10 July 2002	Milk leads to breathing problem, egg l	Nuts - sensitised to tree nuts, and peanuts	Not fed nuts yet. Needs nut free diet	Ladha	0208 9910617
3	26 December 2001	Anaphylaxis to milk	egg - urticaria	nut sensitised, lentils and gram flour lead to GI sym	Amna	0208 903 1675
4	13/07/2004	Milk leads to blotching, no vomiting	At skin test, sensitised to peanuts, and brazil nuts, cashew		Sharman	0208 952 0605
5	14 November 2002	Milk exposed 3 years ago lead to vom	Nuts -sensitised to peanuts only		Maria	0208 428 4608
6	26 December 1995	egg and processed egg	Nuts esp cashew and pistachio	Known asthma	Shahnaz Fehna	0208 728 9375
7	28 October 2005	Multiple food allergy	Milk and many foods lead to eczema	At risk of nut allergy - +ve Skin prick tests	Meenakshi	0208 908 3790
8	11 August 1998	Nut containing foods causes lip chan	Sesitized at SPT to peanuts, and tree nuts	Needs to avoid all nuts	Pritti	0208 864 8727
9	06 January 1995	Milk leads to rashes and wheezes	Tolerates almonds and peanuts	MUST BE ON A MILK AND DAIRY FREE DIET	Sangita	0208 864 6501
10	12 February 2000	Peanut and almond tolerant	Might respond to hazelnut and cashew/pistachio	Oral allergy, kiwi and strawberry	Shantha	0208 954 8224
11	28 July 1994	Dairy leads to asthma symptoms, rash	Hazelnuts mouth symptoms, plus asthma, or vom	Can tolerate almonds, brazilnuts	Parin	0208 428 4484
12	20 June 2000	Hazelnuts - angiooedema with facial sw	Allergic to peanuts - +ve skin tests	Tolerates almonds	Rubina	0208 861 2366
13	29 December 1999	Peanuts - one exposure, face blotchy	Tolerent to all other nuts		Jan	01923 220843
14	04 February 2004	Cashew, Pistachio causes perioral sw	Sensitized on skin test to peanuts	Asthma	Sanja	07889 341543
15	22nd December 2003	Hazelnut, pistachio, brazilnut, peanut	Sensitized to Tree pollen, HDM	Likely allergic rhinitis	Khadja	
16	07 January 2005	Peanuts causes swollen face and peri oral symptoms and runny itchy eyes		Sensitized on skin testing to peanuts (mildly to wal	Sharon	07792 135403
17	21st March 2003	Cow's milk, nuts, egg, banana, strawb	nocturnal cough ? Asthma		Amina	
18	16 January 2004	Tolerent to small amounts of milk. Th	Might adverse reaction to peanut and tree nut therefore should have no nuts	Strict avoidance of these foods	Nainjana	0208 204 2198
19	20 October 2003	Multiple food allergy	No wheat, no eggs, no dairy, no nuts		Eva	0208 200 6689
20	02 June 2003	Multiple food allergy	Milk leads gets breathing and skin symptoms with	Egg, not tried but positive skin test. Needs nut free	Suganthini	0208 866 2518
21	12 November 2003	Sensitized to peanuts and cashews	No nuts - at risk of reaction		Mrs Ramakrishan	0208 908 9360
22	02 October 1994	Walnuts - trace leads to mouth tingling	Almond leads to rash.	Tolerates peanuts	Carol	0208 954 5463
23	07 January 2005	Egg allergy, no kiwi, no advocado	Milk allergy leads to eczematous reactions. Toler	Nut sensitised at skin test	Jane	0208 426 4458
24	08 March 2005	Dairy, nut and egg allergy	Dairy leads to wheezy,	Sensitized to tree nuts	Father	0207 912 1708
25	06 June 2002	Egg fish and nut	Largenal symptoms with fish and egg	SPT to nuts show sensitisation to peanuts, hazeln	Parent	0208 958 5603
26	10 November 1995	Peanut allergy gets stomach pain and	No largenal syptoms	Mild asthma	Father	0208 422 2726
27	21 January 2000	Cashew and pistachio allergic	Unclear other nuts, skin prick test negative	Probably tolerant to peanuts and even other nuts	Mother	0208 428 6778
28	11 September 1999	Peanut allergy leading to rash after pe	No asthma	Skin test positive to tree nuts. Needs nut free diet	Mother	0208 958 8888
29	10 January 2004	Brazilnut and cashew allergic	Peanut tolerant, almond tolerant	No asthma	Mother	0208 979 0036
30	31 October 1999	Tree nut allergy, no asthma	Probably peanut allergy		Mother	07913 997293
31	04 July 2002	Wheeze and cough with cow's milk.		Asthma on beclomethasone	Padmini Desai	07984 011403
32	04 September 2000	Nutella leads to mouth tingling	Mild asthma only		Mrs Carroll	0208 421 4905
33	28 August 2004	All Nuts, egg, cows milk	Wheeze with food allergies. No asthma		Mrs Ramanan	07720 415899
34	30 December 2004	Milk and egg and nut free diet	Milk causes vomiting, egg rashes	Sensitized to peanuts and tree nuts	Mother	020 8958 9560
35	16 June 2003	Egg allergy	Sensitized to brazil nuts, pistachio and HDM		Mother	07908 445086
36	26 May 2005	Pistachio leads to wheezing and facia	Sensitized at skin test to cashew and hazelnut	NUT FREE DIET PLEASE	Mother	
37	04 February 1997	Nut allergy leads to vomiting and whee	Nut allergy proven by skin testing		Mother	07765 341593
38	29 March 2002	Nut allergy, sensitized to tree nuts, not	Baked beans and kidney beans led to resp problem	Mod severe asthma, on Fluticasone	Mother	020 8 424 0729
39	19 November 2002	Nut allergy -including brazil nut, walnut	No asthma		Mother	0208 8638848
40	29 August 1994	Nut allergy - peanut allergy	Asthma therapy via volumatic	Probably tolerant to tree nuts - caution with hazeln	Mother	0208 952 3234
41	03 February 1993	Known peanut allergy	Possible tree nut allergic	Possible fish allergy	Mother	0208 204 3865
42	25 February 2004	Nut allergy: Peanuts and cashews - an	Sensitized (Skin test) to cashews, pistachio	Sesame seeds, strawberries, spat nut, Color fish - an	Mother	020 8 428 8996

Sheet1 Sheet2 Sheet3

Draw AutoShapes

Ready NUM

Action Plan for Allergic Reactions

Name

Date of Birth: 26 December 2001

Insert a photo of child

Known allergies:

Anaphylaxis to milk**egg - urticaria****nut sensitised, lentils and gram flour lead to GI symptoms**

Parent/ Emergency contact:

Name: Amna
Phone no 1: 0208 903 1675

Phone no2:

Plan prepared by:
Dr: HyerSigned.....
Date: 01 April 2008

Department of Paediatrics
Food Allergy Service
Dr Warren Hyer, Consultant Paediatrician
Northwick Park Hospital, Harrow HA1 3UJ
Secretary 0208 949 1444
www.dr-hyer.co.uk (for values of epinephrine)

Mild to Moderate Allergic Reaction

- Tingling in the mouth
- Swelling of lips, face, eyes
- Hives or welts
- Abdominal pain, vomiting or diarrhoea

Action

- Stay with child and monitor
- Give piriton : **2mg=5ml**
- If wheezy, give 10 puffs salbutamol via spacer device
- Call parent/ emergency contact



**WATCH FOR SIGNS
OF SEVERE
REACTION**

- Difficulty/ noisy breathing
- Swelling of tongue
- Swelling/tightness in throat
- Difficulty talking and/ or hoarse voice
- Wheeze or persistent cough
- Loss of consciousness and/or collapse
- Pale and floppy (young children)



THIS IS A SEVERE REACTION

- Give intramuscular epinephrine: **0.15mg**
- Call ambulance 999
- Give piriton: **2mg=5ml**
- Stay with child. Repeat epinephrine dose: **0.15mg at 5 minutes if no improvement.**

How safe are oral challenges in secondary care?

Food allergy tests

Challenging times for food allergy tests

S Roberts

A discussion of their risks and benefits



Challenging times for food allergy tests

S Roberts

Arch Dis Child 2005 90: 564-566
doi: 10.1136/adc.2003.036814

How interpretable are open oral challenges in secondary centres?

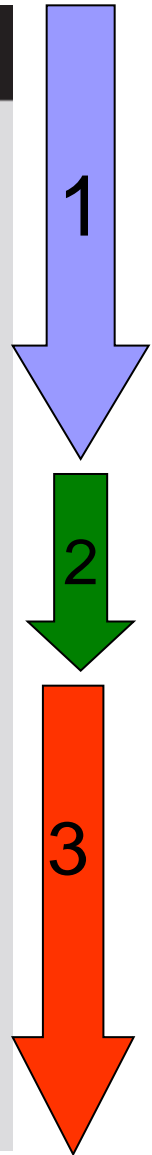
Food allergy tests

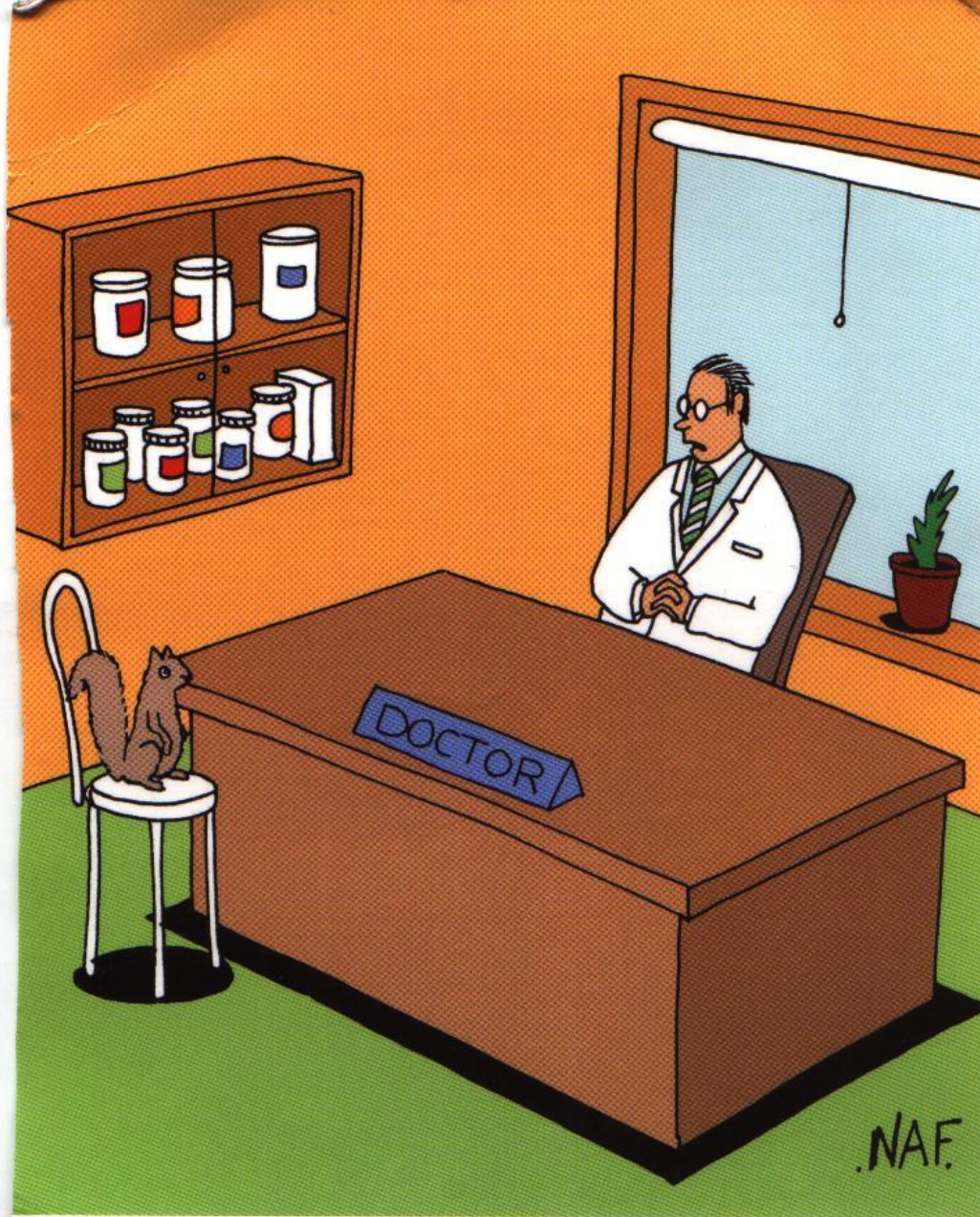
IgE mediated food allergy: when is food challenge needed?

P W Ewan, A T Clark

Box 1: Unified paediatric diagnostic and therapeutic approach

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- (9) Experimental approach: (e.g. specific oral tolerance induction, immune modulating agents, anti-IgE therapy)





"Bit of a bummer really,
you've got a nut allergy."



Conclusion 2

Many aspects of GI food allergy can be provided outside tertiary centres

Should UK allergy services focus on primary care?

The time is ripe to rise to this challenge

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Given the very large numbers of patients with multiple allergies, the demonstrable failure of allergen avoidance measures in improving clinical outcomes for patients with eczema, allergic rhinitis, and asthma,^{2 8 9} and the costs of establishing consultant led specialist centres, we believe it would be more pragmatic to improve service provision in primary care. The report by the House of Commons Health Select Committee and the Department of Health's response to it¹⁰ agreed that primary care organisations should focus on developing and implementing local service models for managing allergy.²



10-minute consultation

Food allergy

Aziz Sheikh, Samantha Walker

- Refer patients with a history of IgE mediated anaphylaxis to an allergy specialist. Consider requesting serum specific IgE tests to the foods implicated while awaiting assessment. Advise the patient to totally

- Most fatal reactions to food occur in people with asthma. In those with both asthma and food induced anaphylaxis, ensure that asthma is optimally controlled.

10-minute consultation

Preventing development of allergic disorders in children

Chantelle Anandan, Aziz Sheikh

Practice

10-minute consultation

Preventing development of allergic disorders in children

Chantelle Anandan, Aziz Sheikh

A 33 year old woman is planning to have a baby and asks you for advice. She wants to know what she can do to reduce the risk of her baby developing allergies.

What issues you should cover

Defining allergy—What does she mean by allergic problems? Are there any conditions that particularly concern her? Understanding of allergy differs widely between professionals and the public, so it may help to clarify her ideas and concerns.

Risk of the baby developing allergic conditions—Babies born into households where one or more first degree relative (mother, father, or siblings) manifest atopic allergic conditions—the most common are eczema, allergic rhinitis, asthma, and food allergy—are at a much higher risk. If one parent is affected the risk is about 50%, increasing to 75% if both parents manifest atopic allergic disease.

Nutrition—How is she planning to feed the baby? The World Health Organization recommends that breast feeding is the optimal source and method of infant nutrition.

What you should do

Before conception

- Explain that there is no evidence that preconceptional dietary change will reduce the risk of a future baby developing allergic conditions, irrespective of the risk in the family.

During pregnancy

- Tell her that inappropriate dietary restrictions can endanger the growth and wellbeing of the developing baby. Such diets may adversely affect maternal or fetal nutrition, resulting in poor gestational weight gain and fetal growth and a preterm birth.

- Recommend that she supplement her diet with fish oil (or omega 3 polyunsaturated fatty acids) from 20 weeks' gestation until delivery. Omega 3 supplementation may help reduce the risk in babies at high risk of allergic conditions.

- Tell her that weak evidence exists that the use of paracetamol and antibiotics during pregnancy may be associated with a higher risk of asthma and hay fever in offspring. She should try to avoid these. However, infrequent use of paracetamol in early pregnancy is unlikely to cause problems.

While she is pregnant or lactating and after birth

- Tell her that high exposure of the baby to tobacco smoke is associated with a higher risk of wheezing in infancy and childhood asthma.

- Explain that, although evidence is lacking, some authorities advise avoiding peanuts during pregnancy and lactation to help reduce the risk of peanut allergy in offspring born into high risk families.

Useful reading

Arstad SH. Primary prevention of asthma and allergy. *J Allergy Clin Immunol* 2005;116:3-14

Friedman NJ, Zeiger RS. The role of breast-feeding in the development of allergies and asthma. *J Allergy Clin Immunol* 2005;115:1238-48

Kramer MS, Kakuma R. Maternal dietary antigen avoidance during pregnancy and/or lactation for preventing or treating atopic disease in the child. *Cochrane Database Syst Rev* 2005;(1):CD0060133 (doi: 10.1002/14651858.CD0060133)

Clough J. *Allergies at your fingertips*. London: Class, 2000 (for patients)

- Recommend that she take probiotic dietary supplements during the last four weeks of pregnancy and during lactation. Some trial evidence indicates that probiotics reduce the risk in infants with a high risk of developing allergic disorders.

Avoiding feeding with cow's milk may reduce the baby's risk of developing atopic eczema. She should breast feed exclusively during the baby's first 4-6 months of life. If she is unable to breast feed, recommend a fully or partially hydrolysed milk formula—these formulas reduce the risk of allergic conditions developing during the first five years of life. Partially hydrolysed preparations generally smell better and are more palatable than fully hydrolysed preparations. Explain that soya based formulas do not reduce the risk.

- Recommend that she wean the infant from the age of 6 months. High risk infants should not be exposed to peanuts and peanut based products until at least 3 years old.

- Explain that evidence is currently insufficient to recommend avoiding aero-allergens (from house dust mite, dogs, and cats) as a prevention strategy. Birth cohort studies indicate that exposure to pets during pregnancy and early life may be protective.

- Reassure her that routine immunisations do not increase the risk of babies developing allergic disorders and are safe to give to babies with food allergies, eczema, or asthma.

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Further references are available on bmj.com

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The BMJ welcomes
contributions from
general practitioners
to the series

10-minute consultation

Anaphylaxis

Aziz Sheikh, Samantha Walker

This is part of a series of occasional articles on common problems in primary care

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A 60 year old man attends to discuss his recent allergic reaction to an insect sting. He presents you with the casualty letter which reads: "Treated for anaphylaxis after bee sting—see GP for follow-up."

What issues you should cover

What happened, and was this anaphylaxis? The term anaphylaxis refers to an acute, potentially life threatening, systemic allergic disorder that involves the cardiovascular or respiratory system, or both.

How quickly did the reaction develop? Symptoms of anaphylaxis typically begin within minutes of exposure. The quicker the onset of symptoms, the more severe the clinical reaction is likely to be. Early features include flushing, urticaria, and intense anxiety (often

Useful reading

Committee on Safety of Medicines. Desensitisation vaccines: new advice. *Current Problems in Pharmacovigilance* 1994;20:5

Project team of the Resuscitation Council (UK). Emergency medical treatment of anaphylactic reactions. *J Accid Emerg Med* 1999;16:243-8

Project team of the Resuscitation Council (UK). Update on the emergency medical treatment of anaphylaxis reactions for first medical responders and for community nurses. *Resuscitation* 2001;48:241-3 (revised May 2005: www.resus.org.uk/pages/reaction/htm)



Conclusion 3

Primary care is already offering food allergy advice and manages the majority of asthma

Overcoming the mystic of food allergy

- Training of juniors
- Consistent approach
- Dietetic input from creation
- Service has led to GP lectures and food allergy training across Brent and Harrow
- Enabled introduction of primary and secondary prevention strategies

What about allergy testing

- Determine a protocol for low risk food challenges
- Refer in high risk challenges
- Operate the 50% rule for oral challenges in secondary care
- And start by doing your own skin tests.....

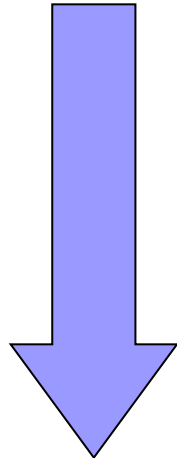
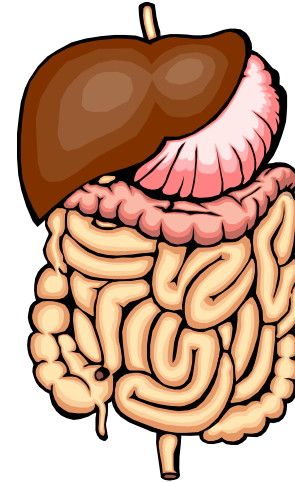
Threats

- Nurse managers who feel that any nurse can skin test
- Beware the beast – you'll never be so popular – tame the beast
- Share your workload with juniors – this specialty is a pleasure to teach
- Learn to teach about allergy fast



The model.....

From organ specific



To atopic



The one stop clinic – theory to practice



Diagnostic testing

Dietetic review

History and
examination

Consultant review,
Emergency protocol
Discuss prognosis
Organise oral challenge

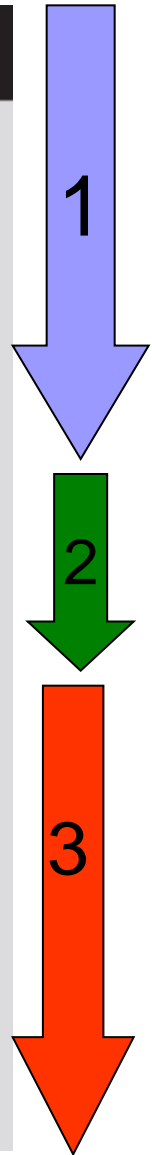
Start here



Outpatient experience= 1 hours

Box 1: Unified paediatric diagnostic and therapeutic approach

- (1) Medical history (e.g. symptoms of skin, gastrointestinal tract, and/or respiratory system)
- (2) Dietary history (e.g. early feeding, current dietary intake, previous intolerance reactions, eliminated foods)
- (3) Physical examination (e.g. weight, height, skin, ENT, chest, abdomen)
- (4) IgE screening (e.g. food specific serum IgE antibody levels, skin prick testing)
- (5) Diagnostic elimination diet (e.g. specific elimination, oligo-allergenic diet, maternal elimination diet)
- (6) Oral food challenges (e.g. open versus double blind, placebo controlled challenges)
- (7) Optional: specific diagnostic tests (e.g. small bowel biopsy for suspected enteropathies, atopy patch test in eczema)
- (8) Therapeutic specific elimination diet (under supervision of dietician, energy and micronutrient supplementation)
- (9) Experimental approach: (e.g. specific oral tolerance induction, immune modulating agents, anti-IgE therapy)



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