

Allergy Today

Allergy UK's publication for healthcare professionals

Winter 2022



Allergy News

Impact Report - Recruiting for Health Advisory Board - Palforzia launches in England
ICS roll out in England - What does this mean for allergy care?

Visit allergyuk.org or call our Helpline 01322 619898



Allergy UK is the operational name of the British Allergy Foundation. We are the leading charity for people living with allergic disease, providing support and advice about all kinds of allergic conditions. We act as the ‘voice’ of the millions of people who live with allergies, representing the concerns and healthcare needs of those affected by this multi-organ disease.

Our strategy for the next five years is centred on a new Mission:

“For everyone in the UK to take allergy seriously”

With our Vision that:

“No-one should die from allergy”

The allergic community is at the heart of everything that we do and our work is focused on improving the lives of people who live with allergic disease.

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Foreword

Professor Adam Fox

Chair of the Allergy UK Health Advisory Board
Consultant Paediatric Allergist, Evelina London Children's Hospital



Welcome to this edition of Allergy Today.

Recently, there have been a number of allergy related headlines, but for all the wrong reasons. The sad case of Awaab Ishak who died from respiratory conditions triggered by mould reminds us why indoor environmental allergies must be addressed with concern. Meanwhile the inquest for Celia Marsh highlights how despite having the correct clinical intervention, the measures which govern how our society operates day-to-day, fall short in keeping safe those who live with food allergies.

At the heart of both cases is a lack of awareness, knowledge, and education on the severity of allergic disease. This underscores why Allergy UK is on a mission with its campaign to ensure both the public and healthcare professionals take allergy seriously.

This issue of Allergy Today includes articles sourced from clinical specialists on topics that are especially relevant for the healthcare professional during this autumn/winter season. As the weather turns cooler and we are spending more time indoors with the heating on, we are creating an environment that is favourable for house dust mites. More information on this indoor allergen can be found in the beautifully illustrated article from Laura King entitled 'A Spotlight on House Dust Mite Allergy'. Another allergic condition with a tendency to be aggravated by the seasons and weather, is eczema, and for this reason, the article 'Everything You Need To Know About Managing Childhood Eczema' offering practical management on eczema, is a must read. Our third seasonal article in this issue is the insightful article from Georgina Martin on '*How Dietitians Can Help Support Patients With A Food Allergy*'. The festive period is upon us, and we know that for those with food allergies, it can be an especially stressful time which may result in more people coming forward looking for additional professional support.

Finally, with winter months placing an extra strain on an already overburdened NHS, the article on 'Why Drug Allergy Matters' is a good reminder to be mindful of drug allergic reactions.

I do hope you find this latest issue of Allergy Today insightful, informative, and inspiring and bid you all the best for the holiday season ahead.

Welcome

Welcome to our latest issue of Allergy Today, Winter 2022.

It's that time of year when we reflect on the strides made over the last year to support the millions of people who live with allergic disease. Naturally with reflection, looking ahead closely follows, so our attentions also turn to what more can be done to improve access to allergy services in 2023. This year however, we do this against a backdrop of the ICS (Integrated Care Systems) roll out in England. In place in Scotland, Wales, and Northern Ireland for some years, this is the first time an ICS structure is being rolled out with research findings available that evidence the benefits of placing specialist allergy provision at primary care level. A trial in Scotland, conducted between 2017 and 2020 and funded by Allergy UK, placed a specialist allergy nurse in a primary care setting to see patients from up to thirteen practices. The approach delivered much better patient outcomes in terms of diagnosis and management, with referrals to specialist secondary care practitioners reducing by up to 95%. Consequently, we believe Allergy UK has unrivalled legitimacy to call for a reformed approach to allergy service provision as part of the new ICS roll out in England. Having outlined what a gold standard of allergy care looks like in our recently launched Patient Charter, the most effective way to deliver this is with a specialist allergy nurse and a dietitian appointed within each ICB at primary care level. In this way, mild to moderate cases of allergy would be held at primary care level, leaving specialist services free to focus on those more challenging of cases. For the patient, the benefits are quicker diagnoses and timely advice and support. For healthcare professionals it means demands on already stretched time and resources match the skillset and training held by most general practitioners. Over the coming months we will be sharing ways in which you can support our calls and further details on the trial, so watch this space and thank you for your ongoing support to the allergic community.



Carla Jones, CEO



Amena Warner, Head of Clinical Services

Allergy News

Making a difference in allergy care

In October this year, Allergy UK, launched its first ever Impact Report. The report covers the period of April 2021 – March 2022 and details the reach of Allergy UK’s support services, resources, and events. The numbers documented in the Impact Report demonstrate the vital role Allergy UK plays in supporting patients living with allergies as well as healthcare professionals in accessing up to date and accurate information on allergic diseases from across the spectrum. The Impact Report is available to read or download by visiting:

www.allergyuk.org/resources/allergy-uk-impact-report-2021-22

Impact Report: numbers at a glance



15,616

new resources created by Allergy UK were accessed during this period

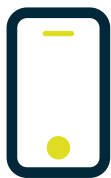


80,269

downloads across all resources available for healthcare professionals to access online were downloaded



40% of calls to our Helpline about children relate to a food allergy enquiry



10,000+

Allergy UK Helpline enquiries received



15 mins is the average length spent on each enquiry which comes in through the Allergy UK Helpline



29%

of calls to the Allergy UK Helpline regarding an adult allergy relate to seasonal or allergic rhinitis



330 children were seen by the dietitian services available via Allergy UK



Allergy UK: Recruiting for Health Advisory Board

Working closely with the best clinical knowledge that exists in allergy is critical to Allergy UK’s success and effectiveness. One way in which we do this, is through our well-respected Health Advisory Board. The purpose of the board is to act in an advisory capacity across several areas such as, responding to complex helpline and media enquiries, and guiding the educational initiatives and resources created by the charity. It is also a valuable resource to ensure that Allergy UK’s clinical information is up to date in terms of research, treatment, and diagnostic tools. We are currently recruiting for members to our Health Advisory Board and our aim is to have a board comprising professionals from a wide cross-section of the healthcare spectrum. Expressions of interest are welcome from tertiary, secondary and primary care including pharmacists,



nurses, GPs, dietitians with a working knowledge of allergy diseases and sensitivities. If you would like to hear more about how your expertise may be of value to Allergy UK, please get in touch via email press@allergyuk.org

Palforzia launches in England

This year saw the launch of Palforzia, an oral immunotherapy treatment, licensed in England for children aged 4–17 years with a confirmed diagnosis of peanut allergy. Currently the management of peanut allergy is primarily based on dietary avoidance and ensuring immediate availability of adrenaline (epinephrine) and antihistamines. Research has shown that food allergy, including the risk of accidental exposure, can have a detrimental impact on quality of life for individuals with food allergy and more support is needed to help reduce this significant psychosocial burden.

In research studies, Palforzia appears to offer protection against accidental exposure to small amounts of peanut. However, there is no evidence



it can cure peanut allergy and so strict avoidance of peanut, as well as adherence to the treatment regime and continued daily maintenance for as long as the treatment is required, is essential.

Due to the specialised nature of this treatment the BSACI (British Society for Allergy & Clinical Immunology) has issued recommendations that peanut immunotherapy should only be offered to patients who fulfil the suitability criteria and be delivered within a specialised allergy setting, with clinicians who are trained to treat and manage patients with severe food allergic reactions. Allergy UK supports Palforzia as a helpful addition to the treatments available for peanut allergic patients.

ICS roll out in England – What does this mean for allergy care?

Many health boards across Scotland, Wales and Northern Ireland have been forming (Integrated Care Systems) since 2016. However, in July 2022 this year, the roll out of 42 Integrated Care Systems (ICS) began across England, each comprising of a newly created integrated care boards (ICB) and integrated care partnerships (ICP). The move sees each ICS take on a range of responsibilities previously assumed by Clinical Commissioning Groups as well as assuming new delegated powers from NHS England. The benefit is that specialist services can be commissioned and designed according to local needs.

The risk to those affected by allergic disease is that this may limit equity of access to the necessary care and provision of services in an already under resourced area of the healthcare system. Over the next year, through the calls and gold standard of care outlined in our Patient Charter, Allergy UK will be working hard to ensure allergy is not lost in commissioning decisions. Our principal priority will be to communicate the positive impact to patient outcomes and cost benefit that access to a Specialist Allergy Nurse and Dietitian at primary care level can bring.

Masterclasses 2023

CLAIM YOUR CPD POINTS FOR EACH MASTERCLASS
IF ATTENDED WITHIN TEN WEEKS OF ITS LAUNCH DATE

Allergy UK produces masterclasses for healthcare professionals on the topic of allergy. Each masterclass is delivered by leading experts in their field. Through lecture-based sessions delegates learn how to better manage the conditions they are exposed to daily.

The next Allergy Masterclass will be in **March 2023** and will cover the topic
RESPIRATORY ALLERGY – ALLERGIC ASTHMA OUTCOMES

To register for updates on any upcoming Masterclasses or to view our previously recorded sessions please visit:

<https://www.allergyuk.org/for-healthcare-professionals/masterclasses/>

The following masterclass is now available on catch up for healthcare professionals to view: **SPOTLIGHT ON HOUSE DUST MITE ALLERGY**

With contributions from *Rebecca Batt*, Paediatric Allergy Advanced Nurse Practitioner; *Glenis Scadding*, Hon. Consultant Allergist and Rhinologist, RENT Hospital London; *Chris Corrigan*, Professor Emeritus of Asthma, Allergy & Respiratory Science, King's College London and Guy's & St. Thomas's NHS Foundation Trust; *Anjum Grewal*, Consultant Paediatric Allergist, Sheffield Children's Hospital; and *Kerrie Kirk*, Children's Allergy Specialist Nurse.

**You can watch the following previously recorded
Masterclasses as they become available to catch up on demand**

- AAI's in Primary Care
- AAI's for Pharmacists
- Spotlight on House Dust Mite Allergy
- Crying baby or Cow's Milk Allergy
- Gut Health in Allergic Babies
- Spotlight on Immunotherapy
- Paediatric Food Allergy

Visit <https://www.allergyuk.org/for-healthcare-professionals/masterclasses/> and complete our form to access our Masterclass library

MORE MASTERCLASSES WILL BE COMING IN 2023. SIGN UP TO RECEIVE INFORMATION ON OUR BACK TO BASICS MASTERCLASS SERIES

10 Ways in which a dietitian can help people with food allergy

Georgina Martin,

Paediatric Allergy Dietitian, Addenbrookes Hospital



Georgina is a Paediatric Allergy Dietitian working at Addenbrookes Hospital in Cambridge, where she is part of the paediatric allergy multidisciplinary team and has been in this role since 2017. She has been working as a paediatric dietitian in the NHS for 10 years, and developed an interest in paediatric allergy early in her career whilst working at the Whittington Hospital in London.

She has worked in a variety of other paediatric specialties in Cambridge including gastroenterology and neonates. Georgina also works for the Allergy UK Dietetic Service, providing advice to parents of under-fives who suspect their child has food allergy. She is currently enrolled on the Postgraduate Diploma in Allergy at the University of Southampton. Georgina is a member of the BSACI and of the Food Allergy Specialist Group of the British Dietetic Association.



1. Diagnosis of food allergy

A dietitian can often be one of the first health professionals that parents or patients come across when feeding difficulties or any issues with food first present, particularly in young infants. They are often referred for allergy assessment, allergy testing (where a dietitian has access to this) and a management plan. Dietitians are well positioned to take an allergy-focused history and identify reproducible food reactions, with referral onto specialist allergy services as required.

Where symptoms are delayed a dietitian is expertly placed to counsel on exclusion diets to aid diagnosis of non IgE mediated food allergy. They can support appropriate exclusion, monitor the symptoms and guide reintroduction to monitor the return (or not) of allergy symptoms.

2. Assess nutrition and growth

Perhaps more obviously, a dietitian can assess nutrition. This becomes essential in people with multiple exclusion diets, who are avoiding many different foods, and may become deficient in specific nutrients (e.g. ensuring iodine sufficiency in diets restricted in milk, egg and fish, for example).

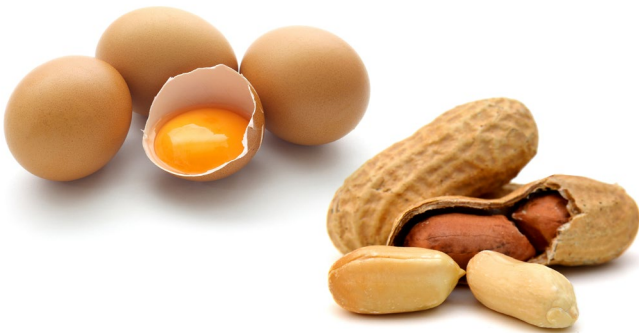
Children and teenagers with food allergy will often benefit from a paediatric dietitian review, as they develop and grow. They have changing nutritional requirements, such as for calcium, energy and protein.

3. Diversifying the diet

We know that dietary diversity is important for overall health and wellbeing. Food allergies can make the diet much more restrictive. A dietitian will help a patient navigate this and identify where alternative foods or ingredients are needed, and signpost to recipes and resources.

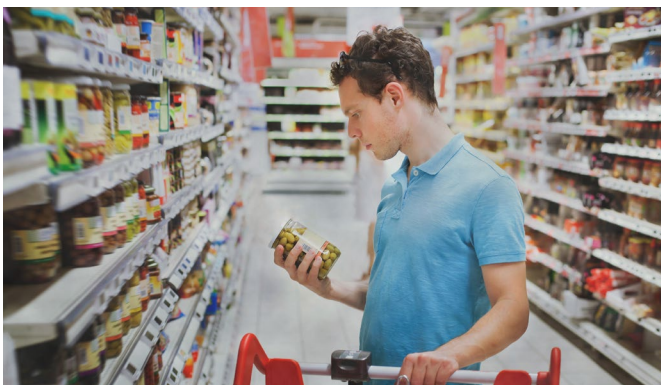
4. Improve quality of life

Finding out you need to avoid a common allergen in your daily diet can be incredibly overwhelming, and have a significant impact on quality of life. Foods such as egg and milk are ubiquitous in packaged foods, with many derivatives in the ingredients lists. A dietitian can help navigate this with the patient and identify where the greatest impact of this will be on their daily life. Spending time on this step initially will help build confidence in patients and families ability to shop safely, and to have confidence when approaching social occasions, school and work.



5. Support food allergy prevention

We know that infants who are at risk of developing food allergies (such as those with severe eczema or known food allergy) benefit from earlier introduction of egg and peanut. Infant feeding and weaning into solids can be an anxious time for parents particularly when they are concerned about food allergies. A dietitian can provide practical tips on how to give allergens in age appropriate forms and ensure that the infant's diet is meeting their nutritional requirements throughout the process.



6. Understanding food labelling

This can be a minefield! Food labelling is confusing for patients, with manufacturers changing recipes often. Part of dietetic support involves helping with understanding the ingredients of a food, where common sources of the allergens are found, and how manufacturers need to make consumers aware of

allergens in their products (for example by highlighting the allergen in bold or italics). We also help patients 'risk assess' when deciding how to interpret precautionary allergen labelling.

7. Help with appropriate alternative products

The rise in 'free from' and vegan products means that there is more choice now than ever for people needing to follow restricted diets. However not all products are created equal, and some are more nutritionally appropriate at different life stages. Some are fortified with additional nutrients and some give greater energy and protein than others – this is especially true of the range of plant-based milk drinks now available.

8. Support with school, or early years settings

Starting school or nursery can be very daunting for parents, and some settings are less experienced than others in managing children with food allergy. An allergy dietitian supporting the family can help with this transition, signposting to resources and helping to determine the extent to which the allergens need to be avoided in each setting.

9. Understanding the level of avoidance needed

It can be difficult to know the extent to which a food needs to be avoided, and if someone can tolerate some allergen in small or well-cooked amounts (e.g. baked egg in egg allergy). Often patients also find this confusing and may lead to over-restrictive diets. A dietitian can help by educating patients on types of foods likely to contain their allergens, and in what form, and if this would be appropriate to continue including in their diets.

10. Reintroducing foods back into the diet

Fortunately some food allergies are outgrown, with a changing picture of food allergy particularly in childhood. There are often windows of opportunity to reintroduce the allergen back into the diet. A dietitian is well placed to guide this process, taking into account age, food preferences, family dynamics and other food allergies. They can provide support along the way with practical ideas of how to get previously avoided foods in the diet. They are also an integral part of hospital food challenges, with food preparation and presentation and then support to keep the food in the diet after a negative food challenge.

Everything you need to know about managing childhood eczema



Sandra Lawton OBE, MSc, RN, OND, RN Diploma (Child) ENB 393, Queen's Nurse

Nurse Consultant and Clinical Lead Dermatology Rotherham NHS Foundation Trust

Sandra is Nurse Consultant Dermatology and Clinical Lead, The Rotherham NHS Foundation Trust and Past Chair of BDNG (British Dermatological Nursing Group) 1998–2000. She is also a specialist advisor for CQC. She qualified as a general nurse in 1981 and as a children's nurse in 2001. She started her nursing career in 1975 prior to her general training at Nottingham Eye Hospital and gained the Ophthalmic Nursing Diploma. Sandra has worked in dermatology for 35 years previously at Nottingham University Hospitals NHS Trust and developed the role of dermatology liaison sister in 1990, the first post of its kind in the UK. Her areas of interest include paediatric dermatology, care of children and their families with atopic eczema, nurse led services and vulval skin conditions. She has contributed to the field of dermatology through her publications, presentations and research at national and international level. She was awarded Public Servant of the Year in 2003, the title of Queen's Nurse in 2007, Stone Award presented by the British Dermatological Nursing Group in 2010, Alumni Laureate Award from The University of Nottingham in 2011, Fellow of Queen's Nursing Institute in 2012 and an OBE for services to nursing in 2014. In 2015 she was also named one of The Most Inspirational People in Nottinghamshire.

Introduction

Atopic eczema (atopic dermatitis) is a common dry, itchy skin condition which usually develops in early childhood, around 70–90% of cases occur before 5 years of age, with a high incidence of onset in the first year of life (NICE CKS 2021) and with as many as one-fifth of children in developed countries now suffering from the condition (Flohr and Mann, 2014). Eczema can have a huge impact on the infants, children, young people and their families' quality of life due to the persistent itching, pain, sleep disturbance and need to apply treatments to maintain control.

Diagnosis

Eczema diagnosis and severity should be based on a detailed history, the clinical presentation, and diagnostic criteria (Box1). The history should include the following and be supported with the Patient Oriented Eczema Measure (POEM) / RECAP (my Eczema Tracker) tool available on the app store, age specific Dermatology Quality-of-life tools (see resources) and visual analogue scales (0 to 10) capturing the child's and/or parents' or carers' assessment of severity, itch and sleep loss over the previous 7 days and nights for monitoring the severity of the eczema, quality of life and response to treatment (NICE 2021):



Assessment Tools

- Patient Oriented Eczema Measure (POEM): <http://nottingham.ac.uk/research/groups/cebd/resources/poem.aspx>
- University of Cardiff Department of Dermatology Quality-of-life tools: <http://www.dermatology.org.uk>
- <https://www.nottingham.ac.uk/research/groups/cebd/resources/index.aspx>

History

- **Onset:** When did the eczema first start?
- **Duration:** How long has the eczema been present?
- **Site:** What areas of the body are affected? What are the worst areas?
- **Pruritus (itch):** How bad is the itching, pain or soreness? How does it affect their life? What do they use or do to try to cope with it?
- **Family history:** Is there, or has there been, anyone else in the family with a skin disease, eczema, asthma or hay fever?
- **Hobbies and leisure time:** What are their hobbies and do they affect the eczema?
- **Triggers:** Have they noticed anything make the eczema flare? These can be irritant or allergic.
- **Clothing:** Are there any fabrics which flare/irritate the eczema?
- **Jewellery:** What type of watches and jewellery do they wear? Many infants and children have bracelets or dummy chains.
- **Impact on quality of life:** How does eczema affect school, activities, friendships, family and relationships?
- **Skin care:** What everyday products (e.g. shampoo, soaps, wipes, make-up, perfumes, after shave etc) do they use? What skin-care products have they used in the past and what are they currently using?
- **Medication:** What medicines do they take regularly? What treatments have they used in the past and what are they currently using (these include prescribed, over-the-counter and products purchased from the internet, market stalls etc). Did these improve the eczema?
- **How do they use their treatments:** Which areas of the body do they apply the treatments? How often do they use them? How much are they using?
- **Allergies:** Do they have any known allergies to medicines or products that come into contact with or are applied to the skin?
- **Diet:** Do any foods make the eczema worse? What sort of reaction occurs? Have they excluded any foods?
- **Growth and development:** should be monitored as manipulation of diet and severe eczema may impact on the child's growth and development

Box 1: Atopic eczema should be diagnosed when a child has an itchy skin condition plus 3 or more of the following (NICE 2021):

- visible flexural dermatitis involving the skin creases, such as the bends of the elbows or behind the knees (or visible dermatitis on the cheeks and/or extensor areas in children aged 18 months or under)
- personal history of flexural dermatitis (or dermatitis on the cheeks and/or extensor areas in children aged 18 months or under)
- personal history of dry skin in the last 12 months
- personal history of asthma or allergic rhinitis (or history of atopic disease in a first-degree relative of children aged under 4 years)
- onset of signs and symptoms under the age of 2 years (this criterion should not be used in children aged under 4 years).

Healthcare professionals should be aware that in Asian, black Caribbean and black African children, atopic eczema can affect the extensor surfaces rather than the flexures, and discoid (circular) or follicular (around hair follicles) patterns may be more common.

Clinical Presentations

The clinical presentation of eczema varies depending on the type of eczema, site affected and skin type. Flexural eczema is commonly associated with childhood eczema however they may have a mixed clinical presentation of flexural, discoid (often miss diagnosed as ring worm) and extensor surface eczema. When assessing the skin ensure all areas are examined and documented using a body chart. Clinically eczema can be classified into:

- **Acute: the skin is erythematous (red) inflamed, oedematous, dry and flaky. There may be vesicles (small fluid filled blisters), which may coalesce to form large bullae (blisters), which ooze and crust.**
- **Sub-acute: shows features of acute and chronic eczema.**
- **Chronic: the skin is lichenified (thickened) with accentuated skin markings from repeated scratching, picking and rubbing. It is often darker than the surrounding skin and fissures (splits and cracks) may be present.**

In children with skin of colour, atopic eczema can affect the extensor surfaces rather than the flexures, and discoid (circular) or follicular (around hair follicles) patterns may be more common with lesions, which in white skin appear red or brown, and appear black or purple in pigmented skin. Mild degrees of redness (erythema) may be masked completely and post inflammatory hypo-pigmentation (reduced) and hyper-pigmentation (increased) may persist after the eczema has settled (Lawton 2015).

Skin Infections

All types of eczema can become infected and are often related to persistent scratching and damage to the skin and contamination of skin care products such as pots of emollients where hands have gone in the pots. It's important to identify the cause/type of infection and initiate the correct treatment, taking samples to confirm the infection may be required based on national guidance, with recent NICE guidance relating to secondary bacterial infection of eczema to not routinely take a skin swab for microbiological testing at the initial presentation (NICE 2021a).

• Bacterial infections

Symptoms and signs of bacterial secondary infection can include weeping, pustules, crusts, no treatment response, rapidly worsening eczema, fever and malaise. Not all eczema flares are caused by a bacterial infection, even if there are crusts and weeping

Eczema is often colonised with bacteria but may not be clinically infected and it's important to manage the underlying eczema and flares with emollients and topical corticosteroids, whether antibiotics are given or not (NICE 2021a). Other bacterial infections include folliculitis, impetigo and cellulitis.

• Viral infections

The herpes simplex virus (cold sore virus) can spread very rapidly in people with atopic eczema (eczema herpeticum). Although it is rare, it is important to recognise because it can be a serious potentially fatal viral illness, requiring hospitalisation and treatment with systemic or intravenous antivirals: aciclovir. In the early stages vesicle (small blisters filled with clear fluid) surrounded by a bright red halo on the surface of the skin will appear. These vesicles leave punched out erosions on the skin surface which spread very quickly, especially across the face. The patient will feel generally unwell with the skin feeling sore, and painful rather than itchy. If eczema herpeticum is suspected, the patient should be seen by a dermatologist and ophthalmologist (if near eyes) on the same day so treatment can be given promptly (Box 2). Other viral infections include molluscum contagiosum and viral warts (Lawton 2014).

• Fungal and yeast infections

Fungal and yeast infections occasionally cause secondary infection in people with eczema. Yeast infections such as candida (thrush) can secondarily infect eczema in warm moist sites such as the nappy area. Fungal infections (tinea) or ring worm (dermatophyte) can develop and often discoid eczema is misdiagnosed as ring worm. If a fungal infection is suspected, skin scrapings, hair and nail samples should be taken for mycology to identify the fungi as applying topical steroids to fungal infections can cause tinea incognito which refers to tinea that has been misdiagnosed and treated inappropriately with topical steroids - the itch may settle a little with topical steroids giving a false sense of security, but the rash progresses. Clinically there tends to be less scale and more pustules (PCDS 2021).

Resources

- British Association of Dermatologists: <https://www.bad.org.uk>
- British Dermatological Nursing Group: <https://bdng.org.uk>
- Primary Care Dermatology Society: <https://www.pcds.org.uk>
- Centre of Evidence Based Dermatology: <https://www.nottingham.ac.uk/research/groups/cebd/resources/index.aspx>
- DermNetNZ: <https://dermnetnz.org>
- Cochrane Skin Group: <https://skin.cochrane.org>
- UK Dermatology Clinical Trials Network: <http://www.ukdctn.org>
- Eczema Care On Line: <http://www.eczemaonline.org.uk/>
- Eczema Written Action Plan (EWAP): <http://www.bristol.ac.uk/ewap>
- The Dragon in My Skin School Resource: <https://www.bcu.ac.uk/health-sciences/research/centre-for-social-care-health-and-related-research/research-projects/eczema-mindlines/the-dragon-in-my-skin>

Box 3: Stepped Treatment Options based on severity (NICE 2021)**Clear: normal skin, no evidence of active atopic eczema****None: no impact on quality of life****Mild atopic eczema**

Skin and physical severity: areas of dry skin, infrequent itching (with or without small areas of redness)

Impact on quality of life and psychosocial wellbeing: little impact on everyday activities, sleep and psychosocial wellbeing

- Emollients
- Mild potency topical corticosteroids

Moderate atopic eczema

Skin and physical severity: areas of dry skin, frequent itching, redness (with or without excoriation and localised skin thickening)

Impact on quality of life and psychosocial wellbeing: moderate impact on everyday activities and psychosocial wellbeing, frequently disturbed sleep

- Emollients
- Moderate potency topical corticosteroids
- Topical calcineurin inhibitors
- Bandages (initiated by a specialist)

Severe atopic eczema

Skin and physical severity: widespread areas of dry skin, incessant itching, redness (with or without excoriation, extensive skin thickening, bleeding, oozing, cracking and alteration of pigmentation)

Impact on quality of life and psychosocial wellbeing: severe limitation of everyday activities and psychosocial functioning, nightly loss of sleep

- Emollients
- Potent topical corticosteroids
- Topical calcineurin inhibitors
- Bandages
- Phototherapy
- Systemic therapy

Management

Eczema management focuses on the identification and avoidance of irritants/triggers; avoiding scratching, which can further exacerbate eczema symptoms and the regular use of emollients (keep control creams) to retain the skin's barrier function; treating flare-ups using topical corticosteroids (TCS) (Flare control creams) tailored to the severity of the eczema and the child's quality of life, including everyday activities and sleep, and psychosocial wellbeing, using a stepped approach (Box3) (NICE 2021). For those with moderate and severe eczema, management may also involve use of topical calcineurin inhibitors (NICE 2004), bandages, systemic therapy (immunosuppressants) and phototherapy (light therapy) (NICE 2021).

Two treatments used well:

A GUIDE FOR ECZEMA SELF-CARE

- There are two main treatments for eczema.
- Both are needed because they help keep eczema under control in different ways

Eczema Care Online



Learn about more ways to manage eczema at: www.EczemaCareOnline.org.uk

EMOLLIENTS

Moisturising creams

Why? Reduce flare-ups by locking water into the skin and keeping things out that may irritate the skin.

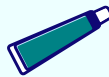
Type? You can use lotions, creams, gels or ointments. All types are equally effective, but you might prefer one type to another.

Choose the right one for you: www.bristol.ac.uk/eczema

Where? Can be used **all over** the body.

When? Use on the skin **every day**. Moisturising creams are used during an eczema flare up and when the skin is clear from eczema.

Are they safe? **Yes**. Sometimes people find they sting when you first put them on, but this should settle after a short time.



TOPICAL CORTICOSTEROIDS

Flare control treatments

Why? Treat flare-ups where the skin is more sore or more itchy than usual.

Type? You can use creams or ointments. Mild eczema is usually treated with a mild flare control cream. Moderate or severe eczema or eczema that is not getting better may need a stronger flare control cream.

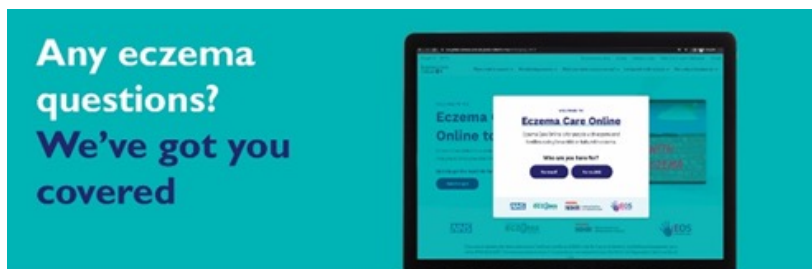
Where? During a flare-up, apply a thin layer to cover the eczema flare-up area. You may need different types for different parts of the body, for example, on the face.

When? Start using once a day **as soon as you spot a flare-up** to get control quickly. After the flare-up is under control, continue using for another two days. If you are using these for more than 4 weeks, discuss this with your doctor.

Are they safe? **Yes**. Flare control creams are safe when following instructions above. Left untreated, eczema flare-ups can lead to more serious problems.

<https://www.eczemacareonline.org.uk/en/printables>

Much has been written about eczema and management and rather than re write it, the next section signposts you to Eczema Care Online has been designed by people with eczema, parents and carers of children with eczema, and a team of health experts using the most up-to-date research evidence and is funded by the National Institute for Health Research (NIHR), which is funded by the UK Government Department of Health and Social Care. So please look at the link which will provide advice and guidance for two treatments used well: emollients (keep control creams) and topical Corticosteroids (flare control creams)(sometimes they are TCIs (Topical Calcineurin Inhibitors) to gain control and keep control of eczema:



Eczema Care Online

EczemaCareOnline.org.uk

Eczema Care On Line: <http://www.eczemacareonline.org.uk/>

This can be further supported with an Eczema Written Action Plan (EWAP) see resources and signposting to the patient groups below. If the principles of eczema management do not improve things then referral will be indicated (Box 2).

Box 2: Referral Criteria Atopic Eczema in Children (NICE 2021)

Refer immediately (same day) for specialist dermatological advice if you suspect eczema herpeticum.

Refer urgently (within 2 weeks) for specialist dermatological advice if:

- the atopic eczema is severe and has not responded to topical therapy after 1 week
- treatment of bacterially infected atopic eczema has failed.

Refer for specialist dermatological advice if:

- the diagnosis is uncertain
- the atopic eczema is not controlled based on a subjective assessment by the child or parent/carer
- atopic eczema on the face has not responded to appropriate treatment
- you suspect contact allergic dermatitis
- the atopic eczema is causing significant social or psychological problems
- the atopic eczema is associated with severe and recurrent infections
- the child or parent/carer might benefit from specialist advice on treatment application.

Refer for psychological advice children whose atopic eczema has responded to management but for whom the impact on quality of life and psychosocial wellbeing has not improved.

Refer children with moderate or severe atopic eczema and suspected food allergy for specialist investigation and management.

Refer children with atopic eczema who fail to grow at the expected growth trajectory, as reflected by the UK growth charts, for specialist advice relating to growth.

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- NICE (2021a) Secondary bacterial infection of eczema and other common skin conditions: antimicrobial prescribing NICE guideline [NG190]: <https://www.nice.org.uk/guidance/ng190>
- PCDS(2021) Tinea corporis (body), cruris (groin) and incognito (steroid exacerbated): <https://www.pcds.org.uk/clinical-guidance/tinea-corporis-body-cruis-groin-and-incognito-steroid-exacerbated>

Patient Groups

- Nottingham Support Group for Carers of Children with Eczema: <http://www.nottinghameczema.org.uk/index.aspx>
- Eczema Outreach Support: <https://www.eos.org.uk>
- National Eczema Society: <https://eczema.org>

Guidelines

- NICE (2021) Atopic eczema in under 12s: diagnosis and management
- Clinical guideline [CG57]: <https://www.nice.org.uk/guidance/cg57>
- NICE (2021) Secondary bacterial infection of eczema and other common skin conditions: antimicrobial prescribing NICE guideline [NG190]: <https://www.nice.org.uk/guidance/ng190>
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Spotlight on House Dust Mite Allergy

By Laura King

Paediatric Asthma Nurse Specialist



I am the tertiary lead CNS for paediatric asthma at Barts Health, working from the Royal London Hospital. I have experience in working with asthma from primary through to tertiary care, and have established several childrens' asthma services in various settings. My background is in urgent and emergency paediatrics, which drives my passion for self-management and accessible, inclusive resources for families. In the new year, I will be taking on the role of Senior Specialist CYP Asthma Practitioner for North-East London.

House Dust Mite [HDM] is one of the most common triggers for children and young people [CYP] with allergic asthma. They are considered a major indoor aeroallergen all over the world that precipitate allergic reactions including rhinoconjunctivitis, food allergy, atopic dermatitis, and allergic asthma (Okasha 2021). Interestingly, it is not the creature itself, but the droppings that cause the allergy, which continues even after the mite has died. We still have a lot to learn about HDM and its place in allergic disease, as well as its impact on the allergic proteins within the body – and therefore how it causes such issues for a tiny creature (Fan Xu 2021)

What is it?

House Dust Mite is a tiny creature measuring around 0.25mm and therefore invisible to the naked eye. They thrive in warm, humid environments rich in human skin scales, as they eat these once they have been partially digested by moulds. They are normal in the human habitat, as we like homes which are warm and comfortable – and aren't a problem for everyone. We can never completely eradicate house dust mite, but we can minimise their numbers and impact for those sensitive to them.

HDM is one of the major perennial allergens for both allergic rhinitis and allergic asthma (Calderon 2015), and one of the most common triggers in the home environment. It can also be one of the most common eczema triggers (Allergy UK 2022). It is particularly problematic because it is often present in homes despite normal cleaning measures, and invisible to the naked eye. They are found everywhere, but particularly in rooms with more soft furnishings such as bedding and upholstery. For this reason they are usually more problematic in the bedroom - causing nocturnal symptoms.

Children will generally present with perennial symptoms (i.e. all year round) which tend to appear at night, or first thing in the morning. They might tell you they cough, and that it wakes them up - or they might say that they cough when they go to bed or first thing in the morning. What is important, is to take a thorough clinical history including family and personal history of atopy, other concurrent conditions and whether the reactions or symptoms are situational or always present. We often find ourselves as specialist clinicians re-taking the histories to understand whether symptoms are seasonal, situational or perennial.

Research has shown that levels of HDM allergens and their nitrated products were generally higher in the winter, at low altitude and in dwellings with higher numbers of females (Fan Xu *et al* 2021).

What to look out for:

Coughing when they are in environments rich in HDM (e.g. bedroom, living room, rooms with soft furnishings). Children with HDM allergy and allergic asthma will typically cough at night time, and first thing in the morning. If they have rhinitis too, they may also cough when they first lay down at night. They might have a runny or blocked nose - and may find that the cough improves with antihistamines and nasal sprays.

Whilst wheeze is a well-known asthma symptom (which may well be triggered by environmental pollutants or irritants), according to Okasha *et al* (2021) more HDM-sensitised CYP will present with cough than wheeze - and the presenting symptom could, according to their study, be a dividing factor. They found a statistically significant difference between HDM sensitised and non-sensitised people - in that those sensitised were mostly associated with cough and allergic rhinitis, and that HDM sensitisation increased disease severity (therefore worsening control).

Impact on daily living

We know that people with atopy are more likely to be affected by HDM (Huang *et al* 2020). It is estimated that 30% of people with atopy (those with one or more allergic conditions such as asthma, eczema, allergic rhinitis or hayfever, and allergies themselves) have had to change their lifestyle to help reduce their risk of reaction. This might include different cleaning products, regimes, or even having to purchase items like a new vacuum cleaner or bedding (Baldacci *et al*. 2015). This alone tells us that almost a third of the allergic population have to make daily changes or financial commitments to manage their allergy. In the context of the cost of living crisis and when we consider the cost of some of these interventions and the availability of suitable housing in some geographical areas, it perhaps is not surprising that some people are more affected than others.

HDM allergy can be really troublesome for many people with allergic asthma. It can be particularly difficult at night, when many people with allergic asthma might cough or feel tightness when their asthma isn't well controlled. We know that people with allergic rhinitis (sometimes called hay fever) tend to have more symptoms when they first lay down, due to post-nasal drip when mucus drips down the back of the throat, causing cough. The 'one airway' model is something clinicians working with people who have asthma and allergies often explain, being the concept that the nose and lungs are joined together as one airway, so inflammation and irritation in one area will trigger all of the airway (PCRS 2022).

Sleep is important for everyone, but it is especially important for children and young people. It is when we heal, grow and process the events of the day - and is vital for physical and emotional health and development (Healthier Together 2022). Good sleep hygiene can be effective to a point, but if symptoms are pointing towards allergy or asthma getting out of control, specific measures can help.

A study carried out by Gomez *et al* (2022) found that school attendance and performance was significantly affected for those with allergic asthma, who also had HDM as a trigger. They also found that school attendance increased following a treatment called Allergen Immunotherapy. You can read more about the treatments for HDM allergy on the Allergy UK website.

Trigger avoidance

HDM reduction measures will lower the numbers of HDM in the home but not completely remove them. Cleaning and following the HDM reduction measures may lower the levels enough to minimise allergy symptoms, but will not eradicate fully. What is evident is that the measures should be taken together - changing bedding alone, for example, is not sufficient. Bedding should be washed at 60 degrees, and if this is not possible should be dry cleaned. It is suggested that pillows could be deep frozen for eight hours at a time, each month. Padded headboards should be avoided, as the mites will reside in them and they are difficult to clean.

For children with bunk beds, it is suggested that the child with the allergy should take the top bunk to avoid dust falling from the top bunk's mattress. Soft toys should be avoided or minimised – precious soft toys or soft furnishings should be washed or frozen monthly. There is no need to deprive children of their favourite toy or "lovey".

If possible, it is suggested that the HDM allergic person does not change the bedding or HDM reduction measures, and does not return into the bedroom until 30 minutes after the bed has been changed. It has been recommended that damp dusting and vacuuming is done at least once per week, avoiding heavy curtains and soft flooring if possible.

Vacuum cleaners with a HEPA filter, and that do not blow out dust, are recommended. This is because they trap the HDM more effectively but also minimise aerosolisation of the HDM itself to the cleaner.



How can we differentiate between asthma and rhinitis? Cough can be key here: I often find myself asking my patients (and their grown-ups) when they cough. If it is in the middle of the night, it is likely to be asthma. If it is when they first lie down it is probably post-nasal drip, an indication of allergic rhinitis.

Treating allergic rhinitis

There are medicines that can help children and young people who are sensitive to HDM, and have allergic asthma or rhinitis. These include nasal sprays (usually containing a steroid) and antihistamines like Cetirizine.

When clinicians choose the treatment, they will carefully consider the child's age and development before deciding on a course of action. Nasal sprays are considered the first-line treatment for those with allergic rhinitis, but are not always practical or effectively administered in young children. Antihistamines can be sedating or non-sedating (meaning they may, or should not - make you sleepy). This is a key message when we consider medications for allergy - whilst historically there was little choice, we now have a good selection of second generation antihistamines which do not have such a high profile in terms of side-effects. This is important when we consider that the child or young person might already be tired at school or nursery because they have been awake in the night whilst the issue is poorly controlled. We might improve attendance to school, but the CYP need to be able to concentrate and engage in the lessons.

One of the most common problems clinicians find in practice, that can have a significant impact on the CYP's symptom control, is device technique. If the person cannot use their inhaler or nasal spray in the best way, the medicine simply doesn't reach the inflamed parts of the airway. Another key learning point here is the fundamental role of pharmacy in the patients' self-management journey – they are so often the only clinicians that see the CYP and their devices at the same time. In this manner, pharmacy teams are well-placed to coach and teach inhaler and device technique as well as counsel on oral medication. We advocate using metered-dose inhaler (pMDI) with a spacer to help the medication reach the smaller airways, and for nasal sprays to be tilted towards the ear on each side to ensure good medicine deposition (Asthma UK, 2022). There are some fantastic instructional videos around this on the Asthma UK website including most inhaler and nasal spray devices.

The most common pharmacological measures to help minimise HDM sensitised allergic asthma and rhinitis are nasal sprays and antihistamines.



Some patients say all the measures feel like a checklist, and no one intervention will minimise HDM on its own.



In summary...

House Dust Mites are tiny creatures that are found in all homes. For many people, they do not cause any problems - but for those sensitised to HDM, and especially those with allergic-driven asthma with cough as their main symptom - HDM allergy can significantly impact the severity and manageability of allergic asthma.

- No one measure will eradicate HDM – it takes different measures to minimise HDM in your home.
- Careful cleaning will help to minimise the impact of HDM on vulnerable CYP, but this must be carried out carefully, with consideration to who is cleaning and the equipment used.
- Measures such as bedding and floor changes can be effective, but only along with other measures and with consideration to the replacement, in the context of effective treatment of asthma and allergic rhinitis.
- Device technique is vital when considering asthma and allergic rhinitis control, and community pharmacy is key to optimising this!
- First-generation antihistamines are the safest and most effective option along with effective management of allergic rhinitis using nasal sprays



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Drug Allergy In Focus

Dr Sophie Farooque BSc (Hons), FRCP, PhD

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Sophie trained at Guys and St Thomas' and was the first ever allergy trainee (NTN) in the UK. Having completed her PhD in mechanisms of aspirin-exacerbated respiratory disease, she was appointed as a consultant in adult allergy at St Mary's in 2010. She is passionate about drug allergy and anaphylaxis and has been quoted as saying "this ability to transform the lives of my patients in the space of a single visit is one of the reasons I love my work as an allergist." She has served three times on BSACI council and is a member of the BSACI perioperative anaphylaxis committee, adult allergy committee and anaphylaxis committees. She is a founder member of the BSACI Penicillin allergy delabelling taskforce

All too often a patient is documented as having a drug allergy but does it really matter?

This article will cover what is a drug allergy, which drug allergies really do matter, how to take a rapid drug allergy history and will end by busting drug allergy myths.



which have just published their first guidelines. She also was a member of NAP6; the Royal College of Anaesthetist's audit of perioperative anaphylaxis and has lectured extensively on the topic of perioperative anaphylaxis both in the UK and abroad. She is keen to improve allergy awareness both amongst healthcare professionals (who often receive little training) and patients (who often struggle to find an allergy clinic). To this end, in March 2022, she published her first book called *Understanding Allergy* (Penguin Random House) aimed at both medical professionals and those suffering with allergy. It reached number 30 in the Amazon best sellers chart.

What Is A Drug Allergy?

Adverse reactions to drugs are common and the term includes all side effects stemming from taking a medication, however, only 5-10% of adverse reactions are due to an allergy¹. An allergic reaction occurs when the immune system overreacts to the drug. This overreaction can be immediate and is often (but not always) IgE antibody mediated or it can be delayed. Immediate drug reactions are the most common allergic drug reaction. Typical symptoms include urticaria, angioedema and at their most severe anaphylaxis (a potentially life-threatening reaction where a patient experiences respiratory difficulties).

Delayed drug allergies are T-cell mediated and at their mildest present with a macular, papular or morbilliform rash (urticaria is not a feature of delayed drug reactions). It is often difficult to tell whether a delayed rash is caused by the infection or the treatment but if due to the infection patients will usually not

experience the reaction again if re-exposed to the antibiotic when well. Non-immediate reactions which has no systemic involvement usually occur 6–10 days after first drug exposure or within 3 days of second exposure².

At their most severe delayed drug reactions can involve bullous blistering, formation of pustules, desquamation, fever, flu-like symptoms and lead to deranged renal and liver function. Examples of severe cutaneous adverse reactions (SCARS) are Stevens-Johnson syndrome and toxic epidermal necrolysis which are variants of the same condition. Other SCARS include acute generalized exanthematous pustulosis (AGEP) and drug reaction with eosinophilia and systemic symptoms (DRESS). The average time of onset varies depending on the SCARS and ranges from 3–5 days after first drug exposure for AGEP to 2–6 weeks after first drug exposure for DRESS².

Top Tip:

If you suspect a patient is experiencing a delayed reaction to a drug then check a full blood count. If their eosinophil count is raised it increases the likelihood that this is the case.

Why Does Drug Allergy Matter?

The implications of an unconfirmed allergy to a drug are often considerable.

For example if a patient is documented as allergic to local anaesthetic but requires a biopsy or dental procedure, it often cannot proceed unless the diagnosis is clarified. Likewise the impact of a record of allergy to contrast media, in a patient requiring an angiogram or CT-scan with contrast is considerable.

The most commonly reported drug allergy is to Penicillin. About 1:10 patients report an allergy but on investigation about 95% are not allergic³. A review of 2.3 million UK primary care records found that around 6% of patients have a label of Penicillin allergy⁴ and of all the drug allergy labels this is the one that has the greatest potential negative impact. Penicillins are the most common class of antibiotic prescribed

globally in primary and care for both common and serious bacterial infections⁵. The likelihood of being documented as Penicillin allergic increases with age and comorbidities⁴; women are also more likely to be documented as Penicillin allergic⁴.

False penicillin allergy labels can arise for a number of reasons, including adverse effects that have been misclassified as an allergy or because a rash triggered by infection is attributed to an allergy. A recent analysis of general practice data found a significant increased risk of MRSA and Clostridioides (Clostridium) difficile infection (CDI) in patients with a record of Penicillin allergy⁶. A label of Penicillin allergy is also associated with a 50% increased odds of surgical site infection⁷, worse outcomes in COVID 19 infection,⁸ bacterial pneumonia⁹ and data from the US indicates an increased risk of Caesarean-section¹⁰.

Once labeled as Penicillin allergic the odds ratio of being prescribed other classes of antibiotics such as: macrolides, tetracyclines, quinolones and clindamycin increases, as does the risk of re-prescription of a new antibiotic class within 28 days⁴. Even after matching for age, sex, index of multiple deprivation, smoking and comorbidities (asthma, cancer, CHD, CKD, COPD, diabetes, PAD, stroke and TIA) patients with a label of Penicillin allergy have an increased risk of all-cause mortality (relative risk 1.08)⁴. This is surprising given the low mortality from infections managed in general practice and is likely to be because second-line antibiotics may not be as effective, may impact more negatively on antimicrobial resistance and might not be as safe.

Which Drugs Cause Allergic Reactions?

Certain medications are more likely to produce allergic reactions than others.

The most common drugs to trigger immediate reactions are:

- Antibiotics
- Non-steroidal anti-inflammatory medications, such as ibuprofen and aspirin
- Paracetamol
- General anaesthetic drugs (neuromuscular blockers)
- Radiocontrast media
- Antiseptics such as chlorhexidine

Although allergy to local anaesthetic is often reported, it is fortunately extremely rare.

The most common drugs that trigger delayed reactions are:

- Antibiotics
- Radiocontrast media
- Anticonvulsants
- Antiretrovirals

If a patient contacts you having had a suspected an allergic drug reaction (the most common symptoms is a rash), they should stop the drug and a drug allergy history should be taken. This will take 2-3 minutes but can really help when evaluating the patient and assessing the likelihood of their being allergic:

Patients with a history of a suspected perioperative allergic reaction should be referred by the anaesthetists and the GP should not be asked to refer. This is due to the amount of information that is needed that the primary care physician will not have access to.

COVID Vaccine Allergy

Allergic reactions to the COVID vaccines are extremely rare and data suggests that 999,992 people out of a million will receive their vaccination without developing a severe allergic reaction. No special precautions are needed in patient with a history of food allergy, insect sting allergy and most medicines (where the trigger has been identified) We now also know that most patients who suffer an allergic type reaction to the COVID vaccine will tolerate a second dose without any adverse effects. The green book has a chapter devoted to the COVID vaccine and within that chapter is a table outlining the approach in patients with a history of allergy and a flowchart detailing how to manage patients who have allergic reactions to a previous dose of COVID-19 vaccine. The British Society of Allergy and Clinical Immunology website also has open access Covid Vaccine Allergy FAQs for GPs¹¹.

How To Take A Rapid Drug Allergy History

1. Make a note of the name of the drug and the dose taken. If the patient thinks they are reacting to a penicillin make a note of which one. If a patient says they have reacted to an over-the-counter

preparation such as Neurofen or Anadin, where numerous different preparations are available on the market, record the active ingredients down.

2. Ask the patient how soon after taking the tablet did they react. Almost all immediate drug allergy reactions will occur in under 60 minutes of taking the medication and often within minutes. So if a patient takes a tablet of Amoxicillin at 18:00 and wakes up the next morning covered in urticaria, the probability of their being allergic is low.



Urticaria can be a sign of an immediate allergic reaction and if so will usually occur rapidly after taking a drug. Allergic reactions to NSAIDs if they are enteric-coated may occur up to 2 hours later. However the majority of urticarial rashes in adults are nothing to do with allergy. A common trigger is infection.

3. Find out where in the course of antibiotics did your patient react? Most immediate allergic reactions will occur shortly after the first tablet of the course.
4. Ask the patient how long did it take for their symptoms to resolve? If an urticarial rash persists for days after stopping a medication the probability of an immediate hypersensitivity reaction decreases.

At this juncture there are two options: to avoid the drug and other drugs in the class moving forwards or to refer to a specialist clinic.

When To Refer To A Specialist Drug Allergy:

- Any patient with a history of anaphylaxis to a drug
- Any patient with a suspected SCAR.
- Any patient reporting a history of allergy to local anaesthetic.
- Any patient with a suspected allergic reaction to an NSAID with symptoms such as anaphylaxis, severe angioedema or asthmatic reaction.
- Any patient specifically needing Penicillin or who is highly likely to need Penicillin.
- Consider referring people to a specialist drug allergy service if they are not able to take beta-lactam antibiotics and at least one other class of antibiotics because of suspected allergies.

In the drug allergy clinic after taking a history, we may perform skin tests and if skin tests are negative, the patient will be asked to try the drug again. This is called a drug challenge and involves taking incrementally increasing the dose of drug in a safe manner. In some circumstances, skin tests to drugs are not helpful and the patient may go directly to drug challenge. Therefore if referring a patient for further evaluation, it is worth giving them a heads up that they may need to try the drug again. If they are unwilling to do this, then there is little benefit in referral.

ACE-I Angioedema

ACE-inhibitor (ACEI) induced angioedema is a potentially fatal complication of ACE-I treatment. Angioedema results from leakage of fluid out of blood vessels beneath the skin. It causes swelling that usually affects the face and tongue but can involve the larynx and patients may require tracheal intubation. Fatalities due to asphyxia have been reported¹². Urticaria is not a feature and the diagnosis is clinical.

The incidence and severity of ACE-I induced angioedema is greater in Afro-Caribbean individuals compared to other ethnic groups¹². Black patients are almost three times as likely to develop an episode of angioedema¹³ and are more likely to be hospitalised as a result¹⁴. Around 30% of cases of angioedema presenting to an emergency department will be secondary to an ACE-I ; 10% of these will require intensive care admission and 18% hospital admission¹⁵.

Case History

A 69 year old Afro-Caribbean woman, with a past medical history of hypertension, type 2 diabetes and hypercholesterolaemia, presented to her GP with a sudden onset of lip and tongue swelling. There was no associated urticaria, pruritus, respiratory difficulties or hypotension. She had no history of atopy or allergy and there had been no recent changes to her medication (perindopril, aspirin, metformin, omeprazole and simvastatin). She was prescribed prednisolone and chlorpheniramine and the swelling resolved over 5 days. A few weeks later she had a further episode of isolated tongue swelling and presented to her GP. She was again prescribed prednisolone and chlorpheniramine and given an adrenaline auto-injector. Three months later her tongue began to swell again; she used her adrenaline auto-injector with no symptomatic relief, so was taken to hospital as an emergency. On arrival in casualty she was unable to speak and her tongue was protruding from her mouth. Attempts to intubate her were not successful and therefore an emergency tracheostomy was performed and she was transferred to intensive care. On discharge, she was diagnosed with ACE-Inhibitor induced angioedema and her perindopril was discontinued.

As ACE-I are generally so well tolerated, the association with angioedema is not always recognised and recurrent episodes before diagnosis are common. The main reasons cited for 'missing' the diagnosis are the delay between drug initiation and symptoms (which can be weeks to months, even years) and the relapsing and remitting nature of the condition. Angioedema is intermittent and can occur weeks to years after starting an ACE-I. Individuals with a history of idiopathic angioedema should not be prescribed an ACE-I due to a higher than average risk of the ACE-I triggering severe swelling¹⁶.

Mythbusters

'I am allergic to hen's egg, so what about the MMR vaccine?'

Patients with a history of anaphylaxis to hen's eggs can receive the measles, mumps and rubella (MMR) vaccine with no special precautions. The MMR vaccine is grown on cells called fibroblasts that are derived from chick embryos and therefore do not contain hen's-egg protein (or if they do contain traces of protein, the levels are too low to cause an allergic reaction).

'I am allergic to hen's egg, so what about the flu vaccine?'

People with egg allergy do not need to avoid the influenza vaccine, and this includes both adults and children with a history of anaphylaxis to egg. In the UK the only exception is adults and children who have had anaphylaxis to egg that is so severe they have required intensive-care admission. Influenza vaccines are derived from the influenza virus, which is grown in hen's egg but, once purified, the amount of residual egg protein remaining is 2,000–5,000-fold lower than the amount that is likely to trigger reactions in people with an egg allergy. The Green Book is updated yearly and gives specific information to family doctors about which influenza vaccines they can or cannot administer to their patients.

"I have taken this drug before, so I can't be allergic"

This is something I frequently hear from patients in my drug-allergy clinic. And I invariably respond that this is not the case, or nobody would develop any new drug allergies! Unfortunately we can develop a drug allergy at any point and the older we get, the more the likelihood of having a drug allergy increases. This is likely to do with the number of exposures and particularly in the case of antibiotic allergy the risk, increases with the number of exposures and the route of exposure.

Therefore drug allergy is largely seen in adults.

If a drug is administered through the skin or into a vein or muscle, developing an allergy is more likely.

'I am allergic to shellfish – I need to avoid iodine'

If a patient is allergic to shellfish, they do not need to avoid drugs containing iodine, such as iodine-based antiseptics or iodine-containing contrast media. Shellfish allergy is due to a specific IgE to certain proteins in the shellfish, and not to iodine.

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