Oxford University Hospitals NHS Trust

Adult Allergy Clinic

How to Recognise and Manage Allergic Reactions

Information for patients
What is an allergic reaction?

An allergic reaction occurs when the body’s immune system reacts to a normally harmless substance. An allergic person’s immune system considers these substances to be potentially damaging and releases histamine to defend the body against them. This causes certain changes in the body, which may produce a variety of mild to severe symptoms. This allergic response can develop after exposure by skin contact, swallowing or inhalation (breathing in).

Anaphylaxis or anaphylactic shock is a condition where the body’s immune system severely over-reacts to something. This results in an acute, severe, potentially (but rarely) fatal allergic reaction, which needs immediate medical attention.

Causes of allergic reactions

Certain Foods
- It is the protein in the food that is usually the allergic part.
- Common allergic foods are nuts (especially peanuts), fish, shellfish, eggs and cow’s milk.
- Most allergic food reactions occur immediately after swallowing. Only rarely do reactions begin several hours after eating.
- Food allergies are more common in people, who have other allergic conditions such as asthma, eczema and hay fever.

Insect stings
- In particular wasp and bee stings.
- The reaction to an insect sting is usually immediate (within 30 minutes).

Natural rubber latex
- Some common sources of latex:
  - Contraceptives: condoms, diaphragms
- Balloons & rubber bands
- Carpet backing & furniture filling
- Rubber gloves
- Medical / dental items such as catheters, gloves, disposable items.

**Medicines**
- Anaphylactic reactions usually occur after the first dose of a course.

**Idiopathic**
- Occasionally, especially in adults, a cause cannot be identified.

**Avoiding Allergens**

**The most important aspect of managing an allergy is to AVOID the substance that you are allergic to (the allergen). You will not experience an allergic reaction if you AVOID the allergen(s).**

**Food**
When a food allergy has been identified, it is essential that you avoid eating even a tiny quantity of the food that you are allergic to (unless advised differently by the allergy clinic). An allergic reaction can also happen after skin contact with that particular food.

A major problem with foods is the accidental exposure to a particular food allergen (especially peanuts) is possible when it is a concealed or an undisclosed ingredient. It is important to:

- Read all labels carefully, even if the product has been eaten before, as recipes change.
- Be more careful when eating out, on holidays, on outings and at parties or functions. These are times when accidental ingestion can occur more easily. Be alert!
- Ask about ingredients in food when eating from restaurants,
ice-cream parlours, in-store bakeries and delicatessen counters (foods are generally unlabelled in these places). Stress the seriousness of the allergic condition to the staff. Preferably talk directly with the chef if necessary – ask about the ingredients and stress the use of clean utensils. If they can not guarantee that a specific dish is safe, it is best to eat elsewhere.

- Ask retailers and manufacturers for lists of produce, which are free from certain ingredients, such as peanuts, nuts, egg, and milk.

- Dieticians are able to give advice about avoidance of particular foods and have very useful information leaflets.

- Cross contamination is a risk for individuals with food allergy. This happens when a food has unknowingly come in contact with the allergenic food. Ideas to reduce the risk of cross contamination include:

  1. Take extra care when preparing food so that contaminated cutlery, crockery, or work surfaces do not come into contact with the ‘safe’ food. For example, use clean utensils and wipe down surfaces with hot soapy water.

  2. Keep any allergenic food separate from other foods.

  3. If a partner, relative or friend has been eating the allergenic food, ask them to wash their hands and rinse their mouth well before touching or kissing.

**Insect stings**

Here are some steps that may help prevent you being stung (by wasps in particular):

- Avoid dressing in brightly coloured clothing in the warmer months.

- Ensure you wear shoes when outside.

- Avoid wearing perfumes and fragrances.
• Avoid eating food (especially sweet ones) outside.

• Avoid canned drinks in the wasp season; boxed drinks with straws may be safer.

• When outside avoid open rubbish bins and keep food covered.

• Avoid picking fruit including fallen fruit.

• Ensure nests are removed promptly.

• Keeping doors / windows closed in summer and/or use fly nets.

• Use insect repellents.

**Natural rubber latex (see separate latex information sheet)**

A severe allergic reaction is most likely to occur when latex has come into contact with mucous membranes or directly with tissue (as during surgery). It is important to:

• Always warn doctors, dentists, paramedic staff and hairdressers if you are allergic to latex.

• Be aware of all substances that may contain latex.

**Medicines**

• Ensure that you know all the names of the medicines that you are allergic to as medicines sometimes have more than one name.

• Always warn doctors, dentists, nurses and paramedic staff what you are allergic to. Wearing an emergency medical alert bracelet recording these is helpful.

• Always check any medicines prescribed to you by your GP or in hospital.
Signs and symptoms

Despite avoiding the allergic substances, accidents can happen. In an allergic reaction any of the following symptoms may occur:

**Mild/moderate symptoms**
- Tingling, itching or burning sensation in the mouth (this is a useful warning that you have eaten a food you are allergic to)
- A nasty taste in the mouth
- Itching of skin, throat and/or eyes
- Rapid development of nettle rash / wheals / hives (urticaria)
- Swelling, particularly of the face and lips
- Feeling hot or chilled
- Rising anxiety
- Flushed
- Tummy, abdominal or stomach pain
- Nausea and/or vomiting
- Mild wheeziness

**Severe symptoms (known as anaphylaxis)**
The presence of any one or several of these features indicates an anaphylactic reaction, which needs to be treated immediately with Epinephrine (Adrenaline):
- Severe swelling of the tongue or throat associated with difficulty in breathing
- Difficulty talking or hoarse voice
- Severe wheeze or difficulty breathing
- Faintness or dizziness
- Looking very pale or blue and clammy
- Disorientated or unresponsive
- Collapse

Milder reactions are much more common. Anaphylaxis, the most severe type of allergic reaction, is uncommon. It can be life threatening, but is very rarely fatal.
Most reactions occur quickly after ingestion or contact with the allergen. Only rarely do they occur a few hours later. There can also be a second phase of the reaction when symptoms recur. This usually occurs within 6 hours of the onset of the reaction. This is called a late phase reaction.

### Actions

Always have antihistamines, and if prescribed, a blue reliever inhaler and / or EpiPen available.

### Actions for Mild / Moderate Symptoms

1. Take an antihistamine such as Chlorphenamine (Piriton), Cetirizine (Zirtek) or Loratadine (Clarityn). (Cetirizine or Loratadine may be better, because they are non-sedating antihistamines and do not cause drowsiness.)

2. Treat mild wheeziness with a blue reliever inhaler (if you have one) such as Salbutamol (Ventolin) or Terbutaline (Bricanyl).

3. Let someone know that you having a reaction and ask them to stay with you to help monitor the reaction to make sure it is getting better, not worse.

### Actions for Severe Symptoms

Remember mild symptoms may develop into a more serious reaction.

1. If the symptoms are or do become severe, as listed earlier, treatment is with an injected drug called Adrenaline. The recommended way of giving adrenaline is with an EpiPen Autoinjector. This is a pre-filled syringe with a concealed spring-activated needle, which automatically injects the correct dose of Adrenaline when the device is pushed firmly against the thigh. The enclosed action plan gives more details on how to administer an EpiPen and a more detailed management plan.

2. Phone 999 and ask for an ambulance with a paramedic crew stating that it is a severe allergic reaction.
3. Lying down may help if you feel dizzy or light-headed. If you are breathless, you may feel more comfortable sitting up.

4. Continue to monitor the condition. If there is no improvement after 10 minutes, a second dose of Adrenaline can be given via another EpiPen. (One dose per EpiPen). Note the time of both doses.

**Things to remember about the EpiPen**

**When is Epinephrine (Adrenaline) given?**

It should be given immediately to anyone having a severe attack. Do not be afraid to use your Epinephrine (Adrenaline). If someone is severely unwell with an allergic reaction, they are more at risk from the reaction than from the EpiPen. It is the most important treatment in stopping a severe reaction and should be given as soon as possible. You should have practiced with a dummy EpiPen, so that you know what to do.

Epinephrine (Adrenaline) may well make you feel more anxious, increase your heart rate, give you a few palpitations, make your breathing a bit more rapid and make you feel nauseated.

**Patient training**

We will show you how to use the EpiPen with a dummy version.

More information can be viewed at: http://www.epipen.co.uk/

Dummy demonstrators can also be obtained through this website or at:

MEDA Skyway House,
Parsonage Road, Takeley
Bishop’s Stortford, CM22 6PU
Tel: +44 (0)845 460 0000

**Carrying the EpiPen**

You should carry your EpiPen at all times. It should remain in the
protective yellow case as the Adrenaline is sensitive to light. It should also be kept at room temperature to prevent the contents from discolouring. It should never be stored in a fridge or left in a hot place.

**Replacing the EpiPen**

It is your responsibility to replace the EpiPen when it has expired, if the contents have discoloured or if the EpiPen has been used. Make a note on a calendar or in your diary to remind yourself. Alternatively, the manufacturers of the EpiPen provide a service where you fill in your details with the expiry date of your EpiPen either on a card or online and they will send you a reminder just before it expires.

**Travelling aboard**

When going on holiday take 2 Epipens with you. If travelling by air, make sure your antihistamines, inhalers and Epipens are in your hand luggage. Some airlines may require a covering letter from your GP when carrying injections (or you can use a copy of your Allergy Clinic letter). Check with the booking agency. If travelling aboard, find out the emergency telephone number for the specific country you are going to and where the nearest hospital is in relation to your holiday destination. It is always best to be prepared! Ensure your travel insurance is aware of your allergy.

**Emergency medical alert bracelets**

These can be obtained from many different companies, but these are a few we have found:

**Medic Alert Foundation**

1 Bridge Wharf
156 Caledonian Road
London N1 9UU
Freephone: 0800 581420
www.medicalert.org.uk
Medi-Tag
Hoopers
37 Northampton Street
Hockley
Birmingham, B18 6DU
Tel: 0121 200 1616
www.hoopers.org/Mediset.htm

Further information

Dr J Reed
Consultant Dermatologist with an interest in allergy
Department of Dermatology
Churchill Hospital
Oxford OX3 7LJ
Tel: 01865 228224

Dr G Ogg
Consultant Dermatologist with an interest in allergy
Department of Dermatology
Churchill Hospital
Oxford OX3 7LE
Tel: 01865 228253

Dr S Misbah
Consultant Immunologist
Department of Immunology
Churchill Hospital
Oxford OX3 7LE
Tel: 01865 743165

Dr R Jain
Consultant Immunologist,
Department of Immunology,
Churchill Hospital,
Oxford OX3 7LE
The Anaphylaxis Campaign
PO Box 275
Farnborough
Hampshire GU14 6SX
Tel: 01252 542029
www.anaphylaxis.org.uk

Allergy UK
3 White Oak Square
London Road
Swanley, Kent BR8 7AG
Helpline: 01322 619898
www.allergyuk.org

Asthma UK
Summit House
70 Wilson Street
London EC2A 2DB
Tel: 020 7786 4900
Helpline: 0845 03 81 43 (Monday - Friday 9am - 5pm)
www.asthma.org.uk

National Eczema Society
Hill House
Highgate Hill
London N19 5NA
Tel: 020 7281 3553
Helpline: 0800 089 1122 (Monday - Friday 8am-8pm)
www.eczema.org

BAD
British Association of Dermatologists
4 Fitzroy Square, London. WIT 5HQ
Tel: 020 7383 0266
www.bad.org.uk
If you need an interpreter or need a document in another language, large print, Braille or audio version, please call 01865 221473 or email PALSJR@ouh.nhs.uk