## allergy and the skin

For the very best medical, surgical or cosmetic treatment, talk to our Consultant Dermatologists here at The Skin Care Network®



## allergy and the skin

Many people are affected by an allergy at some time in their lives - around one quarter of the UK population – so it is an extremely common complaint. And the numbers are going up every year. Children and young people are at greater risk of developing a food or other allergy and this group now forms up to half of all those affected.

Many sufferers already have had an allergy, for example, asthma, atopic eczema (an allergy-related type of eczema that tends to run in families) or allergic rhinitis (a type of allergy that includes hay fever). These conditions are linked to allergies. Often there is a family member with a food allergy or allergy-related condition.

This leaflet will explore more fully how allergies can affect your skin and how we can help you deal with allergy problems.

### what is allergy?

An allergy is an inappropriate response, within the body, to a substance (an allergen). This is not necessarily harmful in itself, but it results in an immune response and a reaction that causes symptoms and disease in someone who is predisposed (allergic). This in turn can cause inconvenience, or a great deal of misery.

Allergy can cause itchy eyes, runny nose, a sore mouth or a skin rash. It may affect the sense of smell, sight, taste and touch and causes irritation, disability and, sometimes, even death (anaphylactic shock). In infants, allergy may include non-specific symptoms such as feeding difficulties, vomiting, restlessness, constipation and sometimes poor growth.

Non-sufferers can lack understanding about the impact allergies can have on your life. However, when asthma, eczema, headaches, lethargy, loss of concentration and sensitivity to everyday foods such as cheese, fish and fruit are taken into account the full scale of the problem is evident.

The range of allergens is huge and many are proteins from plants or animals. The commonest are: pollens from grasses and trees, moulds, house dust mite, pets such as dogs and cats, insects like wasps and bees and foods such as milk and eggs.







Other common allergens include nuts, seafood and latex.

There are also some non-protein allergens which include industrial and household chemicals, medicines, drugs such as penicillin, perfumes, metals (nickel in jewelry and coins) and components in creams (including 'natural', 'organic' and 'dermatologically tested' creams!).

### types of allergy

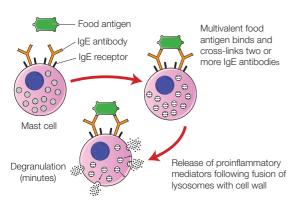
Allergy can be classified into IgE-mediated and non-IgE-mediated allergy. IgE-mediated reactions are acute and can happen fast (such as urticaria, hives and asthma). Non-IgE-mediated reactions are generally characterised by delayed and non-acute reactions (such as eczema, reflux or diarrhoea).

#### IgE-mediated allergy

In IgE mediated allergy the allergic person's immune system believes it is being attacked and so produces a special type of antibody (IgE) to fight the invading material. This leads other blood cells to release further chemicals (including histamine) and together these cause the symptoms of an allergic reaction.

All of these symptoms can be caused by factors other than allergy. Some of the conditions are diseases in themselves. There is generally poor diagnosis of allergy in the UK and the NHS does not have adequate provision for allergy sufferers. That is why you need the advice of a specialist trained in identifying allergy. We offer prick testing as well as tests for specific IgE antibodies (see below) and our Dermatologists and Paediatrician are qualified to diagnose and safely manage children and young people as well as adults with allergic conditions.

It is important that the appropriate test is conducted to investigate the potential cause of allergy. Our Paediatrician or Dermatologist will manage childhood allergy in depth and spend the time required with the family to deal with the allergy.



#### non-lgE-mediated allergy

After taking an allergy-focused clinical history, our Dermatologist or Paediatric Allergist may recommend patch testing (see page 8) or trial elimination diet of the suspected allergen (normally for between two to six weeks). The food will then be reintroduced after the trial, so it is important that this treatment and dietary modifications are done under our specialist supervision to avoid nutritional deficiencies.

#### eczema

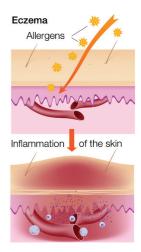
There are two common types of allergy related eczema:

Atopic eczema is extremely common and presents with itchy, dry, red and cracked skin. It usually develops in infancy and childhood, but sometimes appears or continues later in life. The cause is not known but it occurs more often in people who suffer from allergies. For instance, if a young child has severe eczema, particularly with gut symptoms, then it is quite possible there is an allergy related problem.

Symptoms can come and go and, although it can be severe, most people suffer only mildly with it. In children atopic eczema commonly occurs on the head, scalp and neck and in areas with folds of skin such as:

- behind the knees or elbows
- on the side of the neck
- around the eyes and ears

We treat atopic eczema with medications such as emollients, moisturisers applied to the skin to reduce the loss of water from the skin, and topical



corticosteroids to reduce the redness and itching. We also have newer non-steroid containing creams which reduce the inflammation (redness) within the skin. These treatments cannot cure the condition or remove the triggers that cause these types of symptoms. However, they reduce swelling and redness during flare-ups and minimise the damage to the skin from long-term scratching.

Contact dermatitis (a type of allergic eczema) is where the skin becomes inflamed after contact with a particular substance. This effect is often delayed and may occur even if the person has been in contact with the allergen for many years. Symptoms are itchy, dry, red and scaly skin. It most commonly affects the hands and occurs more in women than in men, probably due to their exposure to environmental factors and household chemicals. Contact dermatitis can develop at any age and can affect anybody. Symptoms can come and go and, although it can be severe, most people suffer only mildly with it.

There are two types of contact dermatitis:

#### Allergic contact dermatitis

Allergic contact dermatitis is caused by contact with an allergen. It involves the immune system, the body's natural defence system, which reacts abnormally to specific substances (allergens) usually up to two to four days after exposure to that substance. The body becomes 'sensitised' to the allergen either the first time it makes contact, or commonly after many years of contact. Upon the next contact with the allergen, the body 'remembers' the previous exposure and it causes an allergic reaction.

#### Irritant contact dermatitis

Irritant contact dermatitis is caused by an irritant, a substance that damages the skin physically. It is more common than allergic contact dermatitis, causing up to 80 per cent cases of contact dermatitis. It can occur in anyone who is exposed to irritants for a sufficient amount of time (such as washing your hands too often).

Sometimes, it is possible to have both irritant and allergic contact dermatitis at the same time.

Avoiding the irritant, if that is possible, is recommended as part of your plan to manage contact dermatitis. Most people will experience an improvement after treatment and for around 40 per cent it will clear up completely.

#### urticaria

The other important skin disease which may be caused by allergy is urticaria, a raised, red, itchy rash that appears on the skin. It is also known as hives, welts or nettle rash and the raised marks in the rash are called weals. The rash normally disappears after a few days, although it can sometimes last longer.

Urticaria happens when histamine, which causes redness, swelling and itching, is released into the skin.

Acute urticaria (lasting less than six weeks) affects one in five people at some point in their life, but also commonly affects children. It can be triggered by allergens, such as food or latex; irritants, such as nettles; medicines; or physical factors, such as exercise, cold or heat. However, in around half of acute urticaria cases, no cause can be identified. In these cases, our Dermatologist will take a medical history and may recommend further investigations to identify the cause of the skin problem. These may include a skin biopsy, blood or allergy tests.

In most cases of chronic urticaria (lasting more than six weeks), the cause is not identified, but it may be linked to other diseases, including autoimmune problems (where the immune system attacks its own tissues).

The symptoms of urticaria can be extremely worrying for patients but usually are quickly controlled by your Dermatologist.

However, urticaria can be one of the first symptoms of a severe allergic reaction known as anaphylaxis, which can cause difficulty breathing, a feeling of faintness and sometimes loss of consciousness. This is a life-threatening condition which requires emergency treatment.

# how do we test for allergies?

We offer consultations to diagnose whether or not you are allergic to particular substances. This process includes RAST testing, prick tests and patch testing. We may also organise blood tests in order to further investigate the cause of your allergy.

#### what are prick tests?

Prick tests are carried out by one of our Nurses to diagnose skin diseases and allergy. We will firstly take a full medical history and ask specific questions about your symptoms. The prick test will involve placing a drop



of each suspected allergen on the forearm. Each drop has been specially formulated and standardised for skin prick testing. The epidermal surface of the skin is pricked through the drop. If there is an allergy a wheal and flare reaction, like a mosquito bite, is induced. It is quick and not painful.

For example, we can help identify a food allergy by using this method, especially if parents or patients cannot easily identify the possible source of allergens. In difficult cases, we may use a dietary source from the patient to perform this test in the clinic.



#### what is patch testing?

Patch testing is the most common method for testing reaction to allergens. A Nurse will apply tiny amounts of the suspected substance to your back using a non-allergic tape. Two days later the patches will be removed and the skin reaction will be



assessed for evidence of an allergic reaction. The patches will also be reassessed after four days, at the final reading. These assessments will be undertaken by one of the Consultant Dermatologists. However, sometimes we may want to examine you a few days later as very occasionally some reactions can take longer to develop.

Patch testing can be very useful in diagnosing skin disease caused by occupational exposure or the use of substances on the skin to which you become allergic, such as facial creams, mascara, hair dyes, make up, lipsticks, perfumes and even prescribed, dermatologically tested, organic or natural creams.

Other types of testing are: photopatch, which diagnose an allergic reaction to substances when your skin is exposed to sunlight; open patch testing, commonly used for assessing cosmetics; and Atopic Patch testing for food allergy.

#### what is RAST testing?

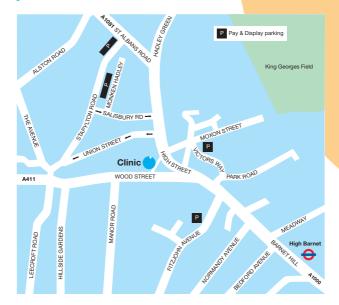
A RAST test is conducted to find out the cause of a reaction, especially if anaphylaxis, a severe and life-threatening condition caused by the allergen, is suspected. A blood sample is taken and small samples of allergen, such as tiny pieces of peanut or shellfish, are placed into the sample of blood.

If a high number of antibodies are found to have been produced in reaction to the allergen this would normally indicate the patient is allergic to the allergen.

There are commercial allergy testing kits offered but these are often of a lower standard than those provided by the NHS or The Skin Care Network®. We strongly advise you not to use these as they could trigger unpleasant symptoms such as a severe skin rash or even anaphylactic shock.

Allergy tests should always be interpreted by a qualified professional who has detailed knowledge of your symptoms and medical history such as the Consultant Dermatolgists and Paediatric Allergists at The Skin Care Network®.

#### you can find us



#### By road

Easily accessible from the M25 (Junction 23), following the A1081 towards Barnet. Pay & Display car parks are indicated on the map and Pay & Display parking bays are also available on local roads.

#### By underground

High Barnet Station, London Underground, Northern Line then head northeast towards Barnet Hill by turning right and continue along the A1000.



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