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Allergy Tests for Eczema: Information for Parents

Parents often ask us if their child with eczema is allergic to something in the belief that removing the allergic "cause" would clear the eczema.

Unfortunately, it is not that simple. It is very rare for childhood eczema to clear after removing or reducing a possible allergen. However, allergies are more common in children with atopic eczema than in other children, so it is helpful for you to think about whether your child might be reacting to something.

Allergies in children with eczema may be:

- 1. Foods most commonly egg and milk in the first year of life or peanuts in older children
- 2. Things in the air (airborne allergens) eg. grass, animal hair
- 3. Things in contact with the skin (contact allergens) eg plasters, preservatives found in some creams.

Things that make eczema worse ("flare") are called "triggers". Eczema often flares in response to several triggers happening at the same time rather than one at a time. Triggers may be allergic in nature, but more often than not, they are non-allergic and include irritants, soaps, stress, heat, tiredness, sweating, changes in weather and having a cough or cold. Therefore, it is only sometimes that allergy tests help to get better control of your child's eczema. In the case of eczema affecting the hands, the most common reason for worsening eczema are the irritant effects from contact with water, soap, sand, play materials, saliva, foods and cold wind. These effects are not allergic ones.

The best way to find out if there is something which causes your child's eczema is to take notice of the reactions your child has. For example, if your child gets itchy patches and swellings on their skin after stroking a cat they do not see often, along with sneezing and a runny nose, then these are fairly reliable signs that your child is allergic to that particular cat.

Food allergies are sometimes harder to spot. If your child gets immediate 'hives' or a nettle rash on the skin or tingling in the mouth when eating a particular food, it is very likely they are allergic to that food, especially if accompanied by vomiting or diarrhoea. Skin prick tests or sometimes blood tests can be done to confirm this. (See details of these tests below.) Remember that atopic eczema is a condition that comes and goes quite quickly and that the best time to look for allergies is when your child's eczema is in a good and stable state.

Skin Prick Tests

These are tests that involve pricking a tiny amount of liquid into your child's forearm to see which ones react. Test liquids are made up out of things that may cause allergies. Drops of these liquids in very dilute form are put on to the arm and the skin is pricked with a tiny needle. If your child is allergic to a particular substance, then they will get a red swelling on their skin after a few minutes.

Written by Professor Hywel Williams, Dr Jane Ravenscroft, Nurse Consultant Sandra Lawton, Dr Jothsana Srinivasan, Dr Ting Seng Tang and parents on behalf of the Nottingham Support Group for Carers of Children with Eczema

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Like the blood test, skin prick tests are only really helpful if they are strongly positive or negative. Skin prick tests cannot be done on skin that is affected by eczema at that time. Anti-histamines must be stopped several days before skin prick tests.

Blood Tests

Blood tests can tell us if your child has antibodies in the blood which could react to common substances that spark off allergies. Blood tests are sometimes helpful to confirm a suspicion of an immediate food or airborne allergy. They can be helpful in babies less than 1 year old to look for allergy to milk and egg if there is no clear skin to do a skin prick test. Blood tests are helpful if they are negative to the suspected food as a negative test is pretty good at ruling out allergy. The blood test is also helpful if it is strongly positive when there is a history of possible allergy. More often than not, especially in older children, the tests come back as low positive which does not mean very much as lots of people without eczema are the same. In other words, what happens in the blood may have little to do with what happens in real life in the skin. Sometimes, especially if your child also has asthma or hay fever, what happens in the blood is more related to those conditions.

Just to summarise then: a strong positive test can be helpful to confirm a suspected allergen. A *negative* blood test is sometimes helpful in telling us that your child is *not* allergic to something. A low positive or multiple low positive tests don't help us a lot.

Patch Tests

These are used to look for another kind of eczema called allergic contact eczema. Sticky patches containing various substances are placed on your child's back. Contact eczema is very uncommon in babies with atopic eczema, but can occasionally occur in older children. It is much more common in adults. For example, someone may have hand eczema due to wearing rubber gloves as they have an allergy to rubber. The rubber substance will show up as a reaction on their back 2-4 days after placing the patches on. Unlike the positive tests for food and airborne allergens, identifying an allergic contact factor such as rubber, glue, perfume or nickel in jewellery offers a good chance of clearing the problem if that factor is avoided.

Other tests

We would not recommend you having high street or internet allergy tests because there is no evidence of their value in the management of atopic eczema.

Final thoughts

If you have any questions about these tests or the information you have read in this leaflet, please discuss with the doctor or nurse caring for your child. Just remember that allergy tests are only part of the story when assessing your child for possible allergies.

Further reading

NICE Food allergy in children and young people (CG116)

http://guidance.nice.org.uk/CG116

Diet and your Child's Atopic Eczema

http://www.nottinghameczema.org.uk/nsgcce/documents/diet-and-your-child-14diet1212.pdf

More about children who have a severe form of allergy called anaphylaxis: www.anaphylaxis.org.uk
British Society of Allergy and Clinical Immunology resources: http://www.bsaci.org/resources/index.htm



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Further information about allergies and testing https://patient.info/allergies-blood-immune/allergies#nav-4	
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