

Information for patients and carers

Allergen Challenge (Provocation) testing



Division of DCS - Allergy & Clinical Immunology



What is an allergen challenge test?

An allergen challenge test exposes you to a substance to determine whether you are allergic to it. Challenge tests are mainly used for foods and drugs.

Why undertake challenge tests?

- 1. There has to be a good reason to want to know whether or not you are allergic to the substance tested.
 - The reason could be medical, e.g., a negative test may allow an important medication to be given
 - The reason could be concerned with how an incorrect diagnosis
 of an allergy may affect your lifestyle or wellbeing, e.g., a negative
 test could mean that you do not have to avoid a particular food
 and you do not need to worry about accidental exposure
 - If the result has no impact on your quality of life there is little value in undertaking the test
- 2. The information cannot be obtained in a different way.
 Challenge testing is riskier than other forms of testing (e.g., skin prick or intradermal testing and blood tests), but is the most accurate way to diagnose food and certain medication allergies.
 (www.nhs.uk)

What are the risks of a challenge test?

The purpose of a challenge test is to provoke symptoms if they can be provoked. Challenge tests are carried out carefully, often starting with extremely small amounts of the test substance and then gradually increasing the amount. In this way an allergic response can be diagnosed at a stage when only mild (but still recognisable) symptoms have occurred. However, we can never absolutely guarantee that a challenge test will not cause a severe reaction (such as anaphylaxis), which, at worst, could result in severe permanent disability or death.

These severe reactions are a recognised risk but are extremely rare. Therefore, a challenge test should be seen as something which carries a low risk of severe harm. If you consent to a challenge test, you are accepting that there is some risk involved and you are satisfied that this is outweighed by the potential benefits.

There are higher risks associated with some conditions and/ or medications when undergoing challenge tests and this will need to be considered when deciding whether to go ahead with a challenge test e.g., poorly controlled asthma or unstable circulatory disease, such as high blood pressure or angina.

Staff in the clinic are trained to respond and manage allergic reactions and have emergency medicine and equipment ready if it should be required.

How is the challenge test carried out?

Challenge tests are carried out in the Outpatient Department at Royal Preston Hospital. Testing can take several hours; it is advisable to bringing something to read. Once the test starts, you should not leave the clinic area without first checking with the staff. After the last allergen exposure you need to wait in clinic for at least an hour, sometimes longer, to ensure that you are well before you leave. If you decide you want to stop the test for any reason, you may do so at any time.

First, you will be asked to sign a form giving your informed consent to the test. Then some basic observations will be taken including pulse, blood pressure and breathing test (peak flow reading). You will be tested with one substance at a time and you will be given increasing amounts of that substance until you develop convincing symptoms of an allergic response or you have reached a reasonable level of exposure without symptoms or you decide you want to stop the test (for whatever reason). If you do have an allergic reaction, we will treat it, and we will want you to remain in the clinic until we are satisfied that it is safe for you to leave.

During allergen challenge tests, it is quite common for patients to experience non-specific symptoms (such as light-headedness, dizziness, faintness or strange sensations) that are not due to allergy. These are uncommon but normal reactions to new and stressful situations and tend to improve with reassurance and get better (rather than worse) as the challenge test proceeds. We do not stop the challenge test for symptoms like these, unless you want to stop.

What if I do not want a challenge test?

Having a challenge test is entirely voluntary. You might decide that you do not want to have one. Some patients prefer simply to assume that they are allergic to the substance in question and avoid it in future. Clearly, this avoids any risk associated with a challenge test but leaves some doubt about whether the allergy genuinely exists.

Before your challenge test

- Please avoid taking any antihistamine medication for 3 days before the challenge test
- If you are unwell with a cold, flu or flu like symptoms, sore throat, viral, chest (or other) infection on the day of the test, please call to let us know – it is almost always better to reschedule under these circumstances
- Please also contact us as soon as possible if the following are applicable to you:
 - Uncontrolled asthma / Chronic Obstructive Pulmonary Disease / Cardiac Ischaemia
 - · You are or may be pregnant
 - Steven Johnson syndrome
 - You are taking Beta Blockers (heart conditions) e.g. Acebutolol, Atenolol, Bisoprolol, Carvedilol, Propranolol.

- You are taking Monoamine Oxidase inhibitors (antidepressant) e.g. Moclobemide, Phenelzine, Isocarboxazid and Tranylcypromine
- You are taking ACE inhibitors (high blood pressure). Most of these medicines have names that end in "pril"
- We may ask that you do not eat while testing is ongoing so please ensure you have eaten breakfast. Testing is usually complete by mid-afternoon; however it can take the whole day in some instances. We provide water throughout the day and food when testing is complete
- It is advisable that you arrange for somebody to be available to transport you home in the unlikely event that you do not feel well enough to drive/get home alone. This is very rarely required
- Unfortunately space is limited in the clinic so we ask that you attend alone however please contact us if there are extenuating circumstances

Contact details

Should you require further advice or information please contact Allergy and Clinical Immunology on 01772 522130.

Sources of further information

www.lancsteachinghospitals.nhs.uk www.nhs.uk www.patient.co.uk www.accessable.co.uk Allergies - Diagnosis - NHS (www.nhs.uk)

All our patient information leaflets are available on our website for patients to access and download:

www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

Lancashire Teaching Hospitals NHS Foundation Trust is not responsible for the content of external internet sites.

Thanks to Dr. C. J. Darroch, Consultant Clinical Immunologist, Royal Liverpool University Hospital, for information contained in this leaflet.

Lancashire Teaching Hospitals is a smoke-free site.

On 31 May 2017 Lancashire Teaching Hospitals became a smoke-free organisation. From that date smoking is not permitted anywhere on any of our premises, either inside or outside the buildings. Our staff will ask you about your smoking status when you come to hospital and will offer you support and advice about stopping smoking including Nicotine Replacement Therapy to help manage your symptoms of withdrawal.

If you want to stop smoking you can also contact the Quit Squad Freephone 0800 328 6297.

Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

Gujarati:

આ માહિતીને સમજવામાં સહાયતા જોઇતી હોય તો કૃપા[કરીને પૂછો. આ માહિતી મોટા છપાણ માં અને અન્ય ભાષામાં ઉપલબ્ધ કરી શકાય છે.

Romanian:

Vă rugăm să întrebați dacă aveți nevoie de ajutor pentru înțelegerea acestor informații. Aceste informații pot fi puse la dispoziție în format mare și în alte limbi."

Polish:

Poinformuj nas, jeśli potrzebna jest ci pomoc w zrozumieniu tych informacji. Informacje te można również udostępnić dużym drukiem oraz w innych językach

Puniabi:

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਸਮਝਣ ਵੱਚਿ ਮਦਦ ਲੈਣੀ ਚਾਹੋਗੇ ਤਾਂ ਕਰਿਪਾ ਕਰਕੇ ਇਸ ਬਾਰੇ ਪੁੱਛੋ। ਇਹ ਜਾਣਕਾਰੀ ਵੱਡੇ ਪਰੀਟ ਅਤੇ ਹੋਰਨਾਂ ਭਾਸ਼ਾਵਾਂ ਵੱਚਿ ਮਹੱਈਆ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ।

Urdu:

دو سر ی زیسانوں او ر بٹر ی اگر آپ کو دی معلومات سمجھنے کے پئےل مدد یک ضرورت ہے تو یکچھپا کہ سے بیان پو یک ضرورت ہے تو یکچھپا کہ یک ضرورت ہے تو

Arabic

مطبو عة با حر ف كبير ة و بلغات إذا كنت تريد مساعدة في فهم هذه لمعلو مات يُر جي أن تطلب ما مطبو عة با حر ف كبير هذه المعلو مات

Department: Allergy & Clinical Immunology **Division**: Diagnostics and Clinical Support

Production date: May 2021 Review date: May 2024

JR637 v1