



SPECIALTY: GENERAL MEDICINE - DERMATOLOGY
CLINICAL PROBLEM: ALLERGY TESTING

There are several ways of testing an individual for an allergic reaction to a substance. It is intended that this guideline explains when and what type of test to perform and in what circumstances to save inappropriate referrals being made.

Patch testing is only performed for established cases of eczema where contact sensitivity is suspected.

Patch Testing

Patch testing is not a standard procedure and patch testing is seldom needed in children with a constitutional (usually atopic) pattern of eczema.

The diagnostic procedure for establishing the presence of allergic contact dermatitis is to carry out patch tests, which takes five days to complete. On day 1 the patient attends the outpatient department has a Standard European Battery (the 30 commonest allergens) applied to his/her back, together with any substances to which the patient or doctor thinks she/he might be allergic. The patient returns on day 3 to have the patch test removed and a first reading carried out; and again on day 5 for a second patch test reading to be carried out.

The following patterns of eczema should raise your suspicion of allergic contact dermatitis, where patch testing may be useful :

- ⇒ eyelid, face or perioral eczema as an isolated feature (these sites may, of course, be involved in atopic eczema or seborrhoeic eczema)
- ⇒ otitis externa
- ⇒ either hand dermatitis or foot dermatitis. Allergic contact dermatitis tends to be worse on the dorsum of the hands or feet, whereas endogenous patterns tend to affect the palms and soles
- ⇒ eczema associated with venous ulcers
- ⇒ unusual patterns of eczema, particularly asymmetrical patterns
- ⇒ finally, if a patient with long standing endogenous eczema suddenly deteriorates, consider allergy to the medicaments s/he is using. Patients can become allergic to virtually any topically-applied substance, even topical steroids, and this can be established by appropriate patch tests
- ⇒ equally, female patients may have developed an allergic contact dermatitis to their cosmetics and this requires referral for patch testing
- ⇒ contact allergic dermatitis is, of course, very common in occupationally-exposed groups, e.g. dentists, hairdressers, printers, etc. Any suspicion of an occupationally-related dermatitis merits referral to hospital

Prick (Puncture) Testing

Children with atopic eczema may undergo Prick Testing, but this is only relevant to the investigation of asthma or hay fever, with which their eczema may be associated. Prick Testing does not help in the management of atopic eczema. It is therefore misleading to inform parents that a child with atopic eczema is being referred to the hospital for allergy testing.

Prick testing is done at St Richard's Hospital for latex allergies.

A Radioallergosorbent Test (RAST)

This may be performed when direct skin testing is impossible because of the generalised dermatitis, extreme dermographia, or the patient's inability to co-operate or to stop using antihistamines. This is more likely to be used when testing for allergies, in foods such as nuts and in instances such as hay fever and fur or dust.

REFERENCES:

Dr Russell-Jones, FRCP. Guidelines for GP Referrals in Dermatology 1997; p10-13, 49, 62, and NHS NICE Guidelines 2000.

Dr Mark H Beers and Dr Robert Berkow, The Merck Manual of Diagnosis and Therapy, Seventeenth Edition, Centennial Edition, 148/Hypersensitivity Disorders p1041-1045.

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PUBLISHED: July 2001

REVIEW DATE: 2 years