

Adult Skin Prick Test SOP

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Adult Skin Prick Testing

Adapted from the BSACI SOP for Skin Prick Testing

Purpose

To ensure safe, consistent, and accurate administration and interpretation of skin prick testing (SPT) for patients being assessed for IgE-mediated allergic disease at AllergyRhino.

Scope

This SOP applies to all healthcare professionals at AllergyRhino or its partner pharmacies who are trained and competent in performing skin prick testing.

Background

Skin prick testing is used to identify sensitisation to specific allergens. A positive result must be interpreted in the context of clinical history, as sensitisation does not always equate to clinical allergy. **Approximately half of positive tests occur in patients not allergic to that allergen**

SPT should only be performed by trained healthcare professionals who are competent in recognising and treating anaphylaxis.

Contraindications and Cautions

Exclusions

- Patients currently on antihistamines, tricyclic antidepressants, or undergoing UV therapy.
 - Short-acting antihistamines must be discontinued at least 72 hours before testing.
- Patients with extensive eczema at proposed test sites.

Cautions

- Pregnant patients.
- Patients with unstable asthma.

- Patients on beta-blockers or ACE inhibitors.

Equipment

- Allergen extracts with positive and negative controls (stored at 2–8°C).
- Individual sterile lancets (single use).
- Skin test measure (ruler or caliper).
- Skin prick test recording sheet.
- Pen, tissues, timer/clock, sharps bin.
- Emergency equipment including 1:1000 adrenaline.

Preparation

- Obtain verbal consent from the patient.
- Perform hand hygiene and use appropriate infection control precautions.
- Ensure the test site (usually the forearm or back) is free from moisturisers and skin conditions like eczema.
- Do not clean the skin with alcohol.

Procedure

1. Ensure patient is seated or lying comfortably.
2. Mark test sites at least 2.5cm apart, avoiding creases, using initials of allergens.
3. Begin with negative control, end with positive control.
4. Place one drop of allergen solution next to each marked site.
5. Use a sterile lancet to prick through the solution into the epidermis at 90° using gentle pressure. Discard lancet immediately into sharps bin.
6. Repeat for each allergen using a new lancet every time.
7. Blot excess allergen gently with tissue to prevent cross-contamination.
8. Advise the patient not to scratch and to report any symptoms of systemic reaction.

Reading the Test

- Wait 10–15 minutes after administration.
- Measure the wheal diameter (in mm). For asymmetric wheals, record two dimensions (e.g., 4x3mm).
- Record the flare if relevant.
- Use skin tape or draw around wheals for documentation if required.

Result Interpretation

- Positive = wheal $\geq 3\text{mm}$ larger than negative control.
- Negative control reaction = potential dermographism.
- No reaction to positive control = consider recent antihistamine use; repeat test off medication or refer for IgE serology.
- Pseudopodia (spoke-like extensions) should be noted but not measured.

Aftercare

- Wheals typically subside within an hour.
- If itching is severe, use oral antihistamines, 1% topical hydrocortisone, or a cold compress if clinically appropriate.
- Ensure patient is advised on results by a clinician, and any necessary avoidance advice is provided.

Documentation

Record the following:

- Date of test.
- Patient details (name, DOB).
- Allergen tested and wheal size in mm.
- Any medications that may interfere (with date/time of last dose).
- Name, role, and signature of the practitioner performing the test.

Clinical Follow-Up

Test results must be reviewed by a qualified clinician who will:

- Differentiate between sensitisation (positive test without clinical allergy symptoms) and allergy.
- Provide appropriate follow-up, including allergen avoidance and treatment options.

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