



EUROPEAN ACADEMY OF
DERMATOLOGY AND VENEREOLOGY

Information Leaflet for Patients

TATTOO ALLERGY

The aim of this leaflet:

This leaflet is designed to help you understand more about tattoo allergies. It tells you more about this condition, what can cause it, how to confirm the diagnosis, and practical advice for managing this condition.

TATTOO ALLERGY

Types of allergic reactions

Allergic reactions in tattoos and permanent make-up can be differentiated as early reactions and late or chronic reactions.

Early allergic reactions

- Are usually caused by products used to prepare the tattoo procedure or by aftercare products.
- Manifest as eczema in and around the tattoo.
- Itching is prominent.
- Occur in the first days after the procedure.
- When the culprit product is eliminated, the allergic reaction will heal rapidly with the use of a corticosteroid cream.
- Patch testing will often identify the causative allergen (e.g. a disinfectant, preservative or aftercare cream).
- A latex allergy (e.g. gloves) can be responsible for severe reactions during the procedure and lead to anaphylactic shock.

Late or chronic allergic reactions

- Are rare but can be problematic.
- Are mainly caused by tattoo inks.
- Often manifest months to years after the placement of the tattoo.
- The clinical presentation can be diverse (presentation like psoriasis, chronic eczema etc...).
- The reaction is usually well delineated and limited to the shape of the tattoo, in particular to one colour in a multicolour tattoo.
- Sometimes more than one tattoo, or the same colour in an older tattoo can be involved.
- Red is often the responsible colorant, but allergies to other colors have been reported.
- Itching is prominent, often leading to scratching and infection.
- Symptomatic treatment is frequently

unsuccessful and invasive techniques may be required (see later).

- Patch testing to identify the culprit allergen is disappointing.

Why is patch testing often inconclusive in tattoo ink allergy?

- The composition of tattoo ink is complex. Most of the ingredients (water and additives such as preservatives) disappear from the body shortly after the procedure.
- The colorants remain and are stored in the skin, which creates the tattoo.
- The allergen causing the reaction, is not present as such in the ink but it is released or formed in the skin with a delay of months to years through degradation of the colorant.
- The role of sunlight is suspected as some allergic reactions manifest after intensive sun-exposure, and the majority of tattoo allergies are located on sun-exposed areas.

How can we confirm a tattoo allergy?

- A skin biopsy can be conclusive and differentiate an allergy from other skin diseases with a similar aspect.
- Advanced diagnostic methods can be helpful to rule out infections and systemic diseases.

How can we treat a chronic tattoo allergy?

- In the first place, a local treatment with a corticosteroid cream or intralesional injection will be prescribed.
- When local therapy is insufficient, administration of oral immunosuppressive medication can be considered. This is not always successful or offers only temporary relief.
- Removal of the involved area can be done by means of different techniques

(surgery, shaving, laser-ablation etc....). The risk of permanent scars must be taken into account when opting for / deciding on an invasive procedure.

Can we predict and prevent tattoo allergies?

- Early reactions can be expected when you have a known pre-existing allergy.
- It is important to inform the tattooist about your medical history, allergies and other diseases. The tattooist will use a check list and ask you to sign the informed consent form.
- Postpone the tattoo and consult a dermatologist if you are in doubt about an allergy. The dermatologist will decide if you need patch testing or not.
- Late reactions to tattoo ink cannot be predicted.
- Systematic, preventive skin testing with tattoo inks is not recommended because, even if negative, it cannot exclude a late reaction.