



ALLERGIC CONTACT DERMATITIS

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Allergic contact dermatitis is caused by your body's reaction to something that directly contacts the skin. Many different substances can cause allergic contact dermatitis, which are called 'allergens'. Usually these substances cause no trouble for most people, and may not even be noticed the first time the person is exposed. But once the skin becomes sensitive or allergic to the substance, any exposure will produce a rash. The rash usually doesn't start until a day or two later, but can start as soon as hours or as late as a week.

Allergic contact dermatitis is not usually caused by things like acid, alkali, solvent, strong soap or detergent. These harsh compounds, which can produce a reaction on anyone's skin, are known as 'irritants'. Although some chemicals are both irritants and allergens, allergic contact dermatitis results from brief contact with substances that don't usually provoke a reaction in most people.

The dermatitis usually shows redness, swelling and water blisters, from tiny to large. The blisters may break, forming crusts and scales. Untreated, the skin may darken and become leathery and cracked. Allergic contact dermatitis can be difficult to distinguish from other rashes, especially after it has been present for a while.

The dermatologist and patient will discuss the materials that touch the person's skin at work and home, and try to identify the allergen. The dermatologist may also perform patch tests. Patch testing is a safe and quick way to diagnose contact allergies. A small amount of the suspected allergen is applied to the skin for a fixed time, usually two days. Some things like nickel, rubber, dyes, and poison ivy, poison oak and related plants are fairly common allergens.

Nickel, part of certain metals, is found in many products. Many chrome-plated objects contain enough nickel to produce a reaction in sensitive people. Stainless steel also contains nickel, but it is bound in such a way that makes stainless steel safe for most nickel-sensitive individuals.

Earrings containing nickel can cause earlobe dermatitis, a very common problem in people allergic to nickel. Needles used to pierce ears, and earrings may trigger this. Only sterile stainless needles should be used for piercing. After piercing wear only nickel-free earrings for at least the first three weeks.

Clothing accessories made of nickel buckles, zippers, buttons and metal clips can cause dermatitis. Nickel-sensitive people can substitute nylon accessories.

Sweating increases dermatitis in nickel-sensitive people. In the summer, items containing nickel can cause an itchy, prickly sensation within 15 to 20 minutes of touching perspiring skin. A rash may appear within a day or two. These same items can be worn for several hours without any symptoms, if perspiration is not present.

Rubber products (latex) often cause allergic contact dermatitis. Rubber can also cause immediate allergic reactions, including itching or burning and hives (welts) under the rubber object. Some people experience itching and tearing eyes and, occasionally, shortness of breath. This is more common in people who wear tight fitting rubber gloves, such as medical workers. Rubber gloves may also cause dermatitis on the skin of the hands under the glove. Vinyl or other synthetic gloves may be substituted.

Many women with rubber allergy can wear foundation garments of non-sensitizing spandex if they do not have rubber-backed fasteners or edges. Some manufacturers market girdles and bras containing no rubber.

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Ingredients in the rubber used in the shoe's construction cause most cases of allergic contact dermatitis from footwear. Adhesives, both rubber and non-rubber, can also cause problems. Even leather shoes may contain these. Shoes without rubber should be substituted.

Paraphenylenediamine (PPDA) is an ingredient found in permanent hair dyes. This ingredient is mixed with an oxidizing agent, such as peroxide, before application. People allergic to PPDA should not use any permanent hair dyes. About one fourth of the people allergic to PPDA are also allergic to ingredients in semi-permanent dyes. Follow the package instructions for a patch test before using any hair dye. Most PPDA allergic people can use temporary dyes or rinses, to blend in gray and brighten hair. A few people, however, will react to these dyes also.

A final option to color hair is henna (vegetable dyes). However, henna doesn't work on all hair. Metallic or Progressive dyes are also called hair-color restorers are safe to use if the scalp is not irritated.

While PPDA dyes are rarely used in clothing, other dyes that may cross-react with PPDA are in clothing. As a result, some PPDA-sensitive patients cannot wear dark clothing, but can wear fabrics dyed in lighter shades. About 25% of PPDA sensitivity people are allergic to certain widely used local anesthetics that are chemical relatives of PPDA. Substitutes may be used.

Chromates, compounds containing chromium, are commonly responsible for allergic contact dermatitis from contact with cement, leather, some matches, paints and anti-rust compounds. Occupational exposure to chromium is common in jobs in the automobile, welding, foundry, cement, railroad and building repair industries.

Chromates are used to tan leather for shoes and clothing. 'Shoe dermatitis' may result from leather containing chromates. Vegetable-tanned footwear can be substituted.

Some matches contain chromates. Touching unlit matches can contaminate fingers. Fumes from a lit match and the charred match head also contain traces of chromates. Placing used matches in a pocket will contaminate the pocket lining, as will book matches.

Poison ivy and its relatives include **poison ivy**, poison oak and poison sumac. In the U.S. these plants produce many cases of allergic contact dermatitis. The reaction looks the same whether caused by poison ivy, oak or sumac. Often patients develop lines of small blisters on the skin where the plant brushed against them.

People sensitive to poison ivy, oak and sumac are often allergic to oils from plants from other countries. A furniture lacquer obtained from the Japanese lacquer tree contains such oil, as do mango rinds and cashew shells.

People with allergic contact dermatitis should:

1. Avoid the allergen that causes the reaction, and materials that cross-react with it. Your dermatologist can help you identify items to avoid.
2. Substitute products made of materials that do not cause reactions.

Patch testing by a dermatologist can alert patients to which substances to avoid.

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