

Transparent Film Dressings for Patch Testing Leads to Better Adhesion and Patient Comfort

To the Editor:

Patch testing is a well-established method for the diagnosis of allergic contact dermatitis. A positive reaction to a suspected allergen, applied under controlled conditions, is used to confirm the clinical suspicion. Different test systems such as T.R.U.E. test (Mekos, Hillerød, Denmark) or Finn chambers (Epitest, Tuusula, Finland) are usually fixed to the skin with adhesive tapes and maintained for 48 hours. However, these tapes are a frequent cause of patient discomfort and cutaneous inflammatory reactions that may interfere with the final reading.¹ On top of that, in some patients, they might loosen before these 48 hours because of sweat or if the patient's skin is oily or hairy.

Tegaderm transparent film (3M, St Paul, MN) is a standard dressing that is commonly used to cover and protect peripheral and central catheters as well as closed surgical wounds.² It is a waterproof dressing that has proven to be more resistant to sweat than regular adhesive tapes and seems to adhere better to

enter for breathability as well. Furthermore, it is a material readily available in every hospital setting as it is commonly used for intravenous dressings.

Patient tolerability to patch testing seems to improve by the use of this transparent film. Compared with classic adhesive tapes, patients feel this dressing is less bulky and interferes less in their daily activities (Fig. 1). In the exceptional case that we may need better fixation, adhesive tapes that are included can be applied at the margins of the film.

Although this alternative may be slightly more expensive than classic adhesive tapes, we consider its application might be worthwhile in selected patients.

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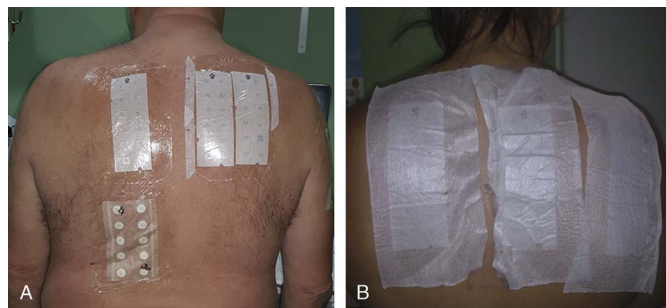


Figure 1. Comparison between transparent film dressings (A) and classic adhesive tapes (B) for fixation of patch test systems onto the skin. Transparent film dressings seem to be less bulky and permit the visualization of irritant reactions underneath.

the surface of an oily or hairy skin. Their transparent surface permits the visualization of the patch test systems and the irritant reactions that may appear underneath.

According to our daily experience, Tegaderm transparent film has proven more waterproof than Scanpor tape (Epitest) and seems to allow sweat to escape the dressing and oxygen to

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What Is Tetrasodium Etidronate and How Is It Related to Formaldehyde?

To the Editor:

A question from a colleague was brought to our attention when a patient noticed tetrasodium etidronate in her American Contact Dermatitis Society Contact Allergen Management Program list. This patient was patch test positive for formaldehyde and wanted to know whether she should worry about any cross-reactions with products containing tetrasodium etidronate.

Tetrasodium etidronate, also known as tetrasodium ethylenediaminetetraacetic acid (EDTA), is a common ingredient in

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many personal care and cosmetic products. Ethylenediaminetetraacetic acid is synthesized from ethylenediamine, formaldehyde, and sodium cyanide. Ethylenediaminetetraacetic acid is frequently used in personal care products and cleaning products as a preservative; it is also used as a stabilizer of metallic ions to prevent discoloration of products. Some other uses of EDTA include medical treatment of lead and mercury poisoning and as an anticoagulation agent for many laboratory uses.

Although we suspected that EDTA's methods of production would aim to maximize consumer tolerability of products and thus lack any residual formaldehyde in the final product, we opted to test this hypothesis using the formaldehyde spectrophotometric method for formaldehyde release. We tested 5 different samples of purified EDTA and EDTA sodium salts (Na_nEDTA) from 5 different vendors using the formaldehyde spectrophotometric method. This method uses chromotropic acid, which can undergo oxidation in an acid environment to render a purple color change in the presence of formaldehyde. Formaldehyde was not detected in any of the samples, confirming that purified EDTA and EDTA sodium salts do not break down into, release, or contain contamination by formaldehyde, despite the use of formaldehyde during the synthesis of EDTA.

Nevertheless, there are previous reports of formaldehyde and formaldehyde releasers present in the sodium salt form of EDTA;¹ however, the results of our small sample study of purified EDTA and disodium EDTA reassure that it would be unlikely for one to develop allergic contact dermatitis from a personal care product that contains purified EDTA if he/she has a known allergy to formaldehyde.

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Sociology of Nickel Allergy

To the Editor:

I read with interest the letter of Rundle et al¹ on the influence of cultural norms on nickel allergy where they report different

nickel allergy prevalences in 2 distinct geographical areas. They explain this difference with some characteristics of the 2 populations: (a) religious background (Seventh-Day Adventist) with lower nickel prevalence and (b) lower socioeconomic status with higher nickel prevalence. This observation refers to the “sociology of nickel allergy,” an issue we had included as a separate paragraph in a former article on nickel allergy.² Fashion and in particular piercing (the main cause of nickel allergy) are essentially influenced by psychological factors and socioeconomic status. Body piercing was found more common among women and associated with a lack of religious affiliation, extended jail time, previous drinking, and recreational drug use.³ Among motivational factors are provocation of a mainstream society, in particular by the youth; imitation; and pressure by peer groups, but these follow also certain concepts of beauty and new personal identities.⁴ Nickel allergy is the only contact allergy that was studied from a sociological perspective. The prevalence of nickel allergy was studied in Malmö, Sweden, a city of 230,000 inhabitants and an unequal distribution of social groups. High prevalences were found in areas with above-average figures of 1-person households, foreigners, unemployed, and persons on welfare assistance.⁵ The hypothesis of nickel allergy as socially determined is supported by different nickel allergy frequencies in junior hairdressers (26%) and junior nurses (12%) at the start of their apprenticeship⁶; hence, an occupation-specific factor can be excluded. Furthermore, in a study of the Information Network of Departments of Dermatology on contact allergies in health care workers, nickel allergy (standardized for age) was found in receptionists more often (29.3%) than in female physicians (16.3%), obviously professions at the extremes of the social status scale in medicine.⁷ Finally, again using the profession as a proxy for social status, we found a significantly increased risk of nickel allergy in waiters, salespersons, cleaners, and textile workers (in each, odds ratio >1.2) (and others) and a significantly lower risk in teaching personnel.⁸ We consider nickel allergy as the socially determined allergy *par excellence*, the dominating social factor probably more important than occupational factors so often studied in other contact allergies.² This insight could (and should) be used as a lever in preventive actions.

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