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The value of pantomiming for allergic contact dermatitis

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Title: The value of pantomiming for allergic contact dermatitis

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Pantomiming enables humans to communicate in a context in which the tools of references are not physically present through mimicry.^{1,2}

Pantomime in dermatology is useful to help understand the pattern of allergic contact dermatitis (ACD). *Alstroemeria*, the Peruvian lily, is a well-documented occupational allergen for florists (**Figure 1**).³ This distribution is clarified as a florist pantomimes hand placement on the flower to strip the stem.³ Garlic is another well-recognized cause of ACD in which pantomime can help explain the distribution involving the non-dominant thumb and index finger that holds the garlic as the dominant hand cuts it (**Figure 2**).⁴

We present three cases where pantomime was useful in diagnosing ACD.

Case 1: Explaining rash distribution

A patient presented with sharply demarcated dermatitis of her left neck. She had positive patch tests to gold, neomycin, and budesonide. Pantomiming the application of topical medications is helpful in understanding distribution of her ACD (**Figure 3**). If hands are spared and therefore the relevance of topical medicament is questioned, it can be useful to ask what was used to apply the medication (e.g. fingertips, cotton applicators, gauze, tissues) Sparing of fingertip may be explained if an applicator was used or if hands were washed immediately after application.

Case 2: Guiding selection of patch test allergens

An auto-body shop worker presented with bilateral dorsal hand dermatitis. When pantomiming daily work tasks, the patient demonstrated using his dorsal hands to put pressure on panels after applying an adhesive. Possible exposure to acrylate adhesive residue on the panels prompted testing an acrylate adhesive series. He demonstrated allergy to ethylene glycol dimethacrylate and other acrylates that may have been missed with testing to only a standard screening series.

Case 3: Identifying primary source of relevance

A pipefitter presented with a dermatitis of the left hand and periumbilical region. Overlying the rash, there were splotches of dried white material on his shirt which prompted a request for him to pantomime how that substance got there. The patient pantomimed holding a paint tray with his left hand lodged against his periumbilical region while using a paintbrush to dip into the tray. The lubricant substance in the tray would splash over the edge onto his left hand and clothing over his abdomen. Patch testing was positive to lanolin relevant to the lubricant and to the medicament used to treat the dermatitis.

Discussion

When using pantomime, prompt the patient by saying “let’s pretend” or “show me” referring to the use of an object. Statements such as “how do you use this?” should be avoided as it may confuse the patient and make the process awkward. It may be helpful to hand any object to the patient that approximates the size of the item they are pretending to handle. Pantomiming can be very helpful in understanding unusual patterns of dermatitis.

Pantomiming can be a powerful diagnostic modality that allows the physician to observe how patients may interact with various products to better diagnose ACD.

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Figures:

Figure 1. Allergic contact dermatitis in florist due to Tulipalin A allergen in Peruvian lily. Classic distribution involves the tips of the thumbs, radial surface of the index and middle finger of the dominant hand.



Figure 2. Allergic Contact Dermatitis. Classic distribution of rash due to garlic allergen involving the non-dominant hand.



Figure 3. Allergic contact dermatitis in a patient allergic to gold and medicaments.



Abbreviations:

Allergic Contact Dermatitis (ACD)





