

## Case Report

# Allergic contact dermatitis from chamomile plant

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### ABSTRACT

Herbal remedies for cosmetic and health-promoting purposes are getting more popular in worldwide. The Compositae (Asteraceae) family of plants is currently an important cause of allergic plant contact dermatitis in Europe. A 55-year-old woman presented with erythema, edema and vesiculobullous lesions over her knees caused by Chamomile. Patch testing with chamomile was positive. The patient has been diagnosed as allergic contact dermatitis. We report a first case of contact dermatitis caused by German chamomile from our country.

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## 1. Introduction

In recent years, the demand for cosmetics containing botanical extract has dramatically increased due to their pleasing fragrance and the perception that these products are safer than the synthetic products (Corazza et al., 2009). Together with this tendency, reports of adverse effects, including allergic contact dermatitis, urticaria and anaphylactic reactions from plant constituents have been rapidly emerged. The daisy family (Asteraceae, Compositae), is an important allergenic plant family in Europe. Although the relevance of other plants (e.g. tea-tree oil) has been well demonstrated, allergic dermatitis caused by compositae is less reported (Paulsen, 2002).

## 2. Case Report

A 55-year-old Caucasian woman suffering from itchy lesions presented to our department with erythema, edema and vesiculobullous lesions over her knees. She had applied Chamomile plant directly to her knees to relieve joint pain, 5 days earlier. On dermatological examination, there were erythema, edema and vesiculobullous lesions over her patellae (Fig. 1).

She was treated with oral Loratadine 10 mg/day combined with topical corticosteroid. Four days later, the lesions resisted and systemic corticosteroid was administered. The lesions started to heal, leaving slight post-inflammatory hyperpigmentation. One month later, patch testing was performed



**Fig. 1.** Erythema, edema and vesiculobullous lesions over her patellae.

with a European standard series and chamomile that she had used before. There was a +++ reaction to the chamomile only, no reaction being seen to other allergens in the standard series. The same application of chamomile plant was negative on patch testing in 15 control subjects.

## 3. Discussion

Plants and their products cause a variety of adverse cutaneous reactions, including the vast majority of cases of allergic contact dermatitis. Corazza et al. showed that 60.25% of dermatological out-patient population reported the use of natu-

ral topical products and 6.22% of them referred one or more adverse cutaneous reactions (Corazza et al., 2009). Hausen et al., indicated the vernacular name 'chamomile' has been used interchangeably for at least 3 different species, namely German chamomile [*Chamomilla recutita* (L.) Rauschert], Roman chamomile [*Chamaemelum nobile* (L.) All.] and dog fennel [*Anthemis cotula* L.]. German and Roman chamomile are both important medicinal plants. Chamomile has experimentally supported effects such as anti-inflammatory, spasmolytic, wound-healing and sedative/anxiolytic and is also used in 'natural' cosmetics and herbal teas (Paulsen, 2002).

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Recurrent facial dermatitis, systemic contact dermatitis and anaphylactic reaction from chamomile tea have been reported (Rodríguez-Serna, 1998; Rycroft, 2003). Compositae-allergic persons should be warned against topical and oral use of Compositae-containing products, not only because of contact dermatitis, but also because of anaphylactic reactions. Besides, patients sensitized to chamomile are also sensitized to mugwort (Andres et al., 2009). Therefore, it is important to inform the patients against the mugwort and pollen-derived food allergens, based on a high incidence of allergic cross-reactivity (Andres et al., 2009).