

Allergic contact dermatitis following aromatherapy with valiya narayana thailam—an ayurvedic oil presenting as exfoliative dermatitis

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Chembolli Lakshmi and Chakravarthi Rangachari Srinivas

Department of Dermatology, PSG Hospitals, Peelamedu, Coimbatore 641004, Tamil Nadu, India

Key words: allergic contact dermatitis; aromatherapy; ayurvedic oil; exfoliative dermatitis.

Ayurveda means the science of life and is a system of medicine native to India and practiced as alternative medicine elsewhere. Because it is a traditional form of medicine, many ayurvedic products have not been tested for efficacy or safety. Adverse reactions to topical and systemic ayurvedic medications are observed but have not been properly documented or reported. In addition, the belief that herbal and ayurvedic medications are 'mild' prevails in India causing people to first use ayurvedic or other alternative medicines before resorting to the 'strong' allopathic medications.

Case Report

A 75-year-old man presented with a 1-month history of generalized pruritus with erythema and scaling of his skin. For the previous 2 months, he had been applying an ayurvedic oil over his right knee and lower leg for joint pain. He developed erythema and pruritus at the sites of application but was counselled to continue the medication. In the ayurvedic system of medicine, the aggravation of symptoms is attributed to the disease 'coming out'.

The possibility of allergic contact dermatitis to the ayurvedic oil with secondary spread was considered. He

responded to topical steroids and 2 weeks later a repeated open application test (ROAT) with the ayurvedic oil (patient's own 'as is') was undertaken over his left forearm. On the second day of application, he developed acute eczema at the site of application (Fig. 1). In addition, he developed generalized pruritus, erythema and scaling resembling his initial clinical presentation (Fig. 2). Systemic corticosteroids were required.

After complete resolution of symptoms, patch testing was carried out

with the Indian Standard Series (ISS) (1, 2) (allergens supplied by Systopic Pharmaceuticals, New Delhi, India), ayurvedic oil (valiya narayana thailam) and sesame oil with readings interpreted as recommended by the International Contact Dermatitis Research Group (ICDRG). The patches were applied using Finn Chambers® on Scanpor® tape (Systopic Pharmaceuticals) and were removed after 2 days. Sesame oil served as a control because most oil-based ayurvedic preparations are in sesame oil.



Fig. 1. Acute eczema over the left cubital fossa following ROAT.



Fig. 2. Generalized erythema and scaling following ROAT.

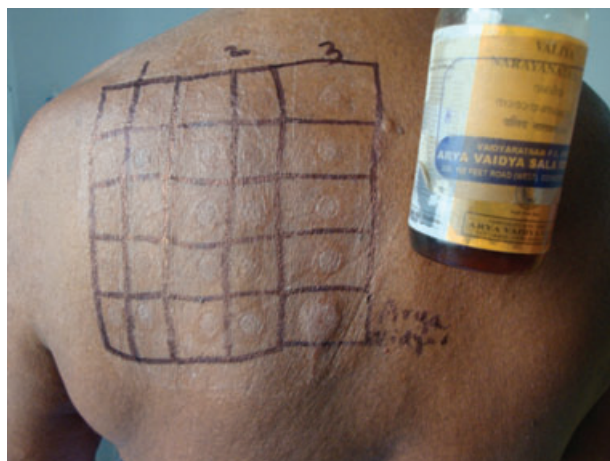


Fig. 3. Patch test reading of +++ on D2 at the site of application of Ayurvedic oil.

Table 1. Ingredients of valiya narayana thailam

Lac Capra

<i>Asparagus racemosus</i>	<i>Oil Sesamum indicum</i>
<i>Aegle marmelos</i>	<i>Withania somnifera</i>
<i>Solanum indicum</i>	<i>Tribulus terrestris</i>
<i>Oroxylum indicum</i>	<i>Sida rhombifolia</i>
<i>Erythrina variegata</i>	<i>Boerhavia diffusa</i>
<i>Solanum xanthocarpum</i>	<i>Premna corymbosa</i>
<i>Merremia tridentata</i>	<i>Stereospermum colais</i>
<i>Alpinia galanga</i>	<i>Anethum graveolens</i>
<i>Cedrus deodara</i>	<i>Desmodium gangeticum</i>
<i>Pseudartia viscida</i>	<i>Vigna radiata</i>
<i>Vigna pilosa</i>	<i>Mesua ferrea</i>
<i>Sodium Chloride</i>	<i>Curcuma longa</i>
<i>Parmelia perlata</i>	<i>Santalum album</i>
<i>Inula racemosa</i>	<i>Ellettaria cardamomum</i>
<i>Acorus calamus</i>	<i>Glycyrrhiza glabra</i>
<i>Valeriana jatamansi</i>	<i>Cyperus rotundus</i>
<i>Plectranthus vettiveroides</i>	<i>Cinnamomum tamala</i>
<i>Eclipta alba</i>	<i>Fritillaria roylei</i>
<i>Lilium polyphyllum</i>	<i>Polygonatum cirrhifolium</i>
<i>Polygonatum verticillatum</i>	<i>Malaxis acuminata</i>
<i>Malaxis muscifera</i>	<i>Habenaria edgeworthii</i>
<i>Habenaria intermedia</i>	<i>Butea monosperma</i>
<i>Casuarina equisetifolia</i>	<i>Boerhavia verticillata</i>
<i>Dryobalanops aromatica</i>	<i>Crocus sativus</i>

Prick testing with the ayurvedic oil was negative and ruled out contact urticaria. Patch test readings on D2 and D4 were negative for sesame oil, whereas the site at which the ayurvedic oil was applied showed reading of 1+ on D1 and +++ on D2 (Fig. 3). A plant series was not applied. To rule out an irritant reaction, patch testing was carried out with the ayurvedic oil in 10 volunteers all who tested negative. The constituents of valiya narayana thailam are listed in Table 1.

The patient was advised not to use valiya narayana thailam and remained free of lesions when reviewed after 5 months.

Comment

Following the induction of sensitization, an eczematous reaction can be elicited at the site of contact of allergen within 18–48 hr. With continued contact, the reaction may spread beyond the site of application or even become

generalized due to secondary dissemination. Rarely patch testing in a sensitized individual may result in very severe reactions and lead to exacerbation of the patient's eczema (3). Continued exposure to allergen resulting in erythroderma has been reported in *parthenium* dermatitis (4). Patch testing with *parthenium* leaf in a sensitized subject was accompanied by aggravation of pruritus and constitutional symptoms (5).

Thailams are oil-based ayurvedic preparations that are for topical use and are usually applied with massage and may be considered to be a type of aromatherapy. Usually 20–30 plants and sometimes up to 100 are used in the preparation of ayurvedic medicines. Ayurvedic oil is made by heating the plant material in a base oil such as sesame oil.

Although adverse reactions to ayurvedic preparations are observed, there are no previous well-documented reports.

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Address:
Chembolli Lakshmi,
Associate Professor
Dept. of Dermatology
PSG Hospitals
Coimbatore – 641004
Tamil Nadu
India
Tel: + 0422 2570170 ext. 5223
Fax: + 914222594401
e-mail: cl_coimbatore@yahoo.co.in