

Title: Leonine facies in a masseuse as a result of allergic contact dermatitis.

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Allergic contact dermatitis to essential oils and fragrances, is known to be an occupational hazard for massage therapists.^{1,2} We report an interesting case with a long history of exposure to contact allergens resulting in a leonine facies.

CASE REPORT

A 61 year old Malay female was referred to our contact dermatitis clinic with a 14-year history of persistent pruritic rashes, initially affecting her hands, then in the more recent years, her face and arms as well. She has been working as a traditional Malay masseuse, treating postpartum women for the past 20 years. She would only occasionally use disposable plastic gloves. She prepares the massage oils using a base of extra virgin olive oil (labelled 100% pure and cold-pressed), and adds additional fragrances with a variety of different essential oils such as lavender oil(*Lavandula officinalis* flower oil), lemon grass oil(*Cymbopogon citratus* leaf oil), lime(*Citrus aurantifolia* peel oil) and ginger oil(*Zingiber officinale* root oil). She occasionally used perfumes on her clothes, and very rarely used makeup. She also used Sofeel® brand of shampoo and conditioner. Her past medical history included asthma.

Clinically she had a striking leonine facies with confluent thick, indurated plaques on her central forehead, cheeks, nose and chin, with prominent convexities and furrowed creases (Figure 1a). She also had lichenified eczematous plaques mainly over the dorsum of her hands and forearms. We observed her habitual face-touching behaviour due to pruritus. Skin biopsy showed histology consistent with an eczematous, possible contact allergic process. Patch tests were performed with the department's standard,

cosmetic, bakery series and the patient's own massage oils, using IQ Ultra chambers (Chemotechnique Diagnostics, Vellinge, Sweden). Patches were removed at 48 hours with readings taken at 72 hours, reactions measured according to the International Contact Dermatitis Research Group recommendations.³

Results showed weak positive (+) reactions to Fragrance Mix 1 and 2, Methylisothiazolinone(MI), Methylchloroisothiazolinone and Methylisothiazolinone (MCI/MI), Isoeugenol, Hydroperoxides of Limonene, her plain extra virgin olive oil (Figure 2) and strong positive (++) to her own preparation of lemon grass oil in extra virgin olive oil. These were all deemed to be of current relevance. Diagnosis of both allergic contact dermatitis to her own shampoo (containing fragrances, MI, MCI/MI) and occupational allergic contact dermatitis to her own massage oils (lemon grass oil and extra virgin olive oil) was addressed with careful avoidance of the allergens. Within 2 months, her leonine facies and upper limb rashes completely resolved (Figure 1b).

DISCUSSION

Allergic contact dermatitis in masseurs from essential oils and fragrances may initially present on the hands, and thereafter may extend to involve the forearms, face and neck.² Essential oils are complex and may have as many as 100 distinct constituents in any one oil.⁴ Additionally, variable concentrations within oils, degradation by-products, quelching effect, make determining the sensitizing agent difficult. Masseurs are not only at risk of sensitization to essential oils, which may have cross reactivity, pseudo cross reactivity or concomitant sensitization to other fragrances and oils.⁴ Industry hygiene practices necessitate frequent hand washing, with further risks of sensitization to wash-off product excipients like MI/MCI.

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Figure Legend

Figure 1A: Leonine facies secondary to allergic contact dermatitis.

Figure 1B: Complete resolution 2 months post patch test with avoidance of allergens.

Figure 2 Weak positive (+) positive patch test reaction to patient's extra virgin olive oil.



Figure 1A: Leonine facies secondary to allergic contact dermatitis.

Figure 1B: Complete resolution 2 months post patch test with avoidance of allergens.



Figure 2 Weak positive (+) positive patch test reaction to patient's extra virgin olive oil.