

Textile dermatitis from silk

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Key words: contact urticaria; immediate-type allergic reaction; late phase reaction; silk product; sericin. © Munksgaard, 1997.

Case Report

A 44-year-old Japanese woman with hay fever developed itchy eczema. She had a past history of nocturnal asthma in childhood. She showed oval erythematous patches on her back, buttocks, thighs, forearms, neck and popliteal fossae that had persisted for 2 years. She reported wearing silk panties and a long-sleeved silk negligée. The lesions were located where such clothing was worn in close contact with the skin.

She had 13% eosinophils and a total serum IgE of 230 U/ml. Scratch test results are summarized in Table 1. The site of the sericin test initially showed no reactions, but 5 h later, indurated erythema developed, which persisted for a day. 3 scratch tested control subjects gave negative results. Patch tests in the same subjects were all negative. On lymphocyte stimulation challenge with sericin, the stimulation index was 886% in the patient but 192% on average in 3 normal subjects, 415% to silkworm cocoon, 217% to raw silk, 131% to fibroin and 144% to pieces of her clothing.

Table 1. Scratch test results

		30 min	D1
pieces of her clothing	as is	—	—
silkworm cocoons ^{a)}	as is	+	+
raw silk	as is	+	+
sericin	5% aq.	—	+
fibroin	5% aq.	—	—
histamine	0.1%	+	—
saline		—	—

^{a)} *Bombyx mori*.

Discussion

Wool, silk, rubber and nylon have all been known to cause allergic contact urticaria in textiles. Rudzki (1) reported a case from a silk coat. Although allergy to silk is a well-known occupational hazard in sericulture, allergic reactions to silk products are rare. Silk fiber consists of fibrous protein filaments, fibroin, glued together with sericin. The sericin is usually removed from silk during manufacture in the degumming process. Fisher (2) described the differences in the nature of silk allergens: (i) silk fiber; (ii) sericin in raw silk; (iii) silkworm protein. In finished silk, there may be sericin in incompletely degummed silk fibers and contamination with material from silkworms, pupa or cocoons.

We concluded that the patient was hypersensitive to silk, showing an early-phase reaction to silkworm cocoons and raw silk and a late-phase reaction to sericin. Some of these allergens persisting in silk cloth could be the cause of her dermatitis. The clinical picture together with the positive skin test and negative reactions in control subjects suggest that the problem is immunological.

References

1. Rudzki E. Contact urticaria from silk. *Contact dermatitis* 1977; 3: 53.
2. Fisher A A. *Contact dermatitis*, 4th edition. Baltimore: Williams & Wilkins, 1995: 797.
3. Hatch K, Maibach H. Textile fiber dermatitis. *Contact Dermatitis* 1985; 12: 1–11.
4. Rycroft R J G, Menné T, Frosch P J. *Textbook of contact dermatitis*, 2nd edition. Heidelberg: Springer-Verlag, 1995: 504–515.

Primula dermatitis mimicking herpes simplex

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Contact dermatitis from *Primula* species has been well-documented (1). Its commonest manifestation is a facial dermatitis, often with oedema, but bullous, vesicular, urticarial and even erythema-multiforme-like lesions have also been reported (2–4).

Case Reports

Case no. 1

A previously fit, 52-year-old woman presented with a week's history of an eruption on the face and hands. Over the preceding 3 days, she had had general malaise,

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