

PRIMULA ALLERGIC DERMATITIS SIMULATING OCCUPATIONAL CONTACT DERMATITIS INDUCED BY METALS, OILS AND GREASES

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Abstract

A case of the hands and face dermatitis in a patient employed in a store with motor-car spare parts is presented. Both the patient and her doctor were convinced that skin lesions were caused by the contact with metals, oils and greases. After detecting allergy to primine (after 48 and 96 h, ++), the patient recalled that two months earlier she had started to grow primrose (*Primula obconica*) at home. Patch tests with the primrose leaf and flower were also positive (++) . The presented case provides evidence that routine primine testing is essential in all patients with suspected contact allergy dermatitis. In Poland like in the majority of countries, primina is not included in the standard kit.

Key words:

Primula, *Primula obconica*, Allergic contact dermatitis, Differential diagnosis

CASE REPORT

A 52-year-old woman without history of atopy employed in a shop with motor car spare parts for 15 years consulted a physician in the Department of Occupational Diseases. Three months earlier she developed hand dermatitis, af-

fecting particularly the fingers (erythema, vesicles) and erythema with edema on the eyelids and cheeks (Figs. 1 and 2). The patient and her doctor were convinced that the dermal changes were due to contact with metals, lubricants or greases at her workplace. Therefore, she was



Fig. 1. Primula dermatitis faciei.



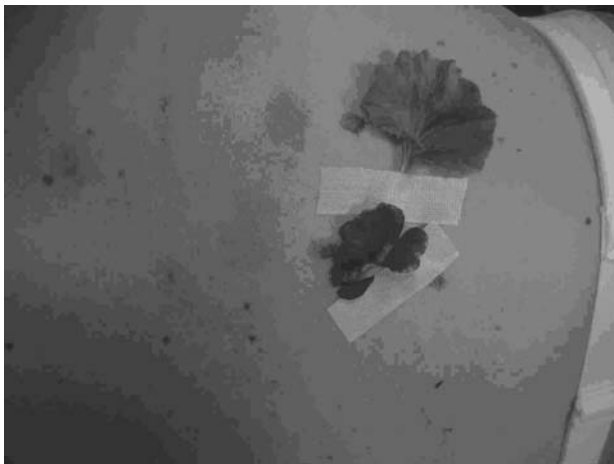
Fig. 2. Primula hand dermatitis.

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Table 1. Patch test results

	D2	D4
European Standard (Chemotechnique Diagnostics, Malmö, Sweden)		
Nickel sulfate (5% pet.)	+	+
Primin (0.01% pet.)	++	++
Oil & Cooling Fluid Series (Chemotechnique Diagnostics, Malmö, Sweden)	-	-
Our own materials		
Leave of primula	++	++
Flower of primula	++	++

**Fig. 3.** Positive patch test with leave and flower of primula.

referred to the Nofer Institute of Occupational Medicine. The patient was patch-tested (Table 1). When she was informed that she was primin-positive, she recalled that 2 months before the detection of the dermal changes she had brought home a primula (*Primula obconica*). She was additionally patch-tested with primula leaf and flower. After 48 and 96 h, the tests were positive (++) (Fig. 3). The plant was removed from the patient's home and the dermal symptoms considerably receded.

DISCUSSION

The primula allergen is contained in glandular hairs located on the surface of leaves, stems and flowers. Patients have linear streaks of erythema and vesicles on the forearms, hands, and face. Sometimes the changes are non typical (erythema multiforme, pompholyx, seborrheic dermatitis, herpes simplex) [1,3–5].

We report this case to illustrate a high likelihood of misdiagnosis. The location and character of the dermal changes could suggest an occupational origin of the disease, while the patient herself failed to note the adverse effect of the contact with the plant grown at home. Besides, the case points to the necessity for primin testing of all patients with suspected allergic contact dermatitis. In Poland like some other countries, primina is not included in the standard allergen set.

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