

Phytophotodermatitis: A Diagnosis to Remember

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A 15 year-old healthy female presented to the emergency department with a painful rash on both hands evolving for the past three days. On the day before the onset of symptoms, she had been squeezing and cutting limes to make a pie, and afterwards went to the pool and sunbathed. The patient had previously been observed and was being treated with flucloxacillin, desloratadine, and systemic prednisolone, without improvement.

Physical examination revealed erythematous and edematous areas and some vesicles and blisters, on the back of both hands (Fig. 1). Furthermore, linear lesions were observed in the interdigital areas. There were no skin lesions on the palms or other parts of the body. Blood analysis showed a normal complete blood count and C-reactive protein. Based on clinical history and physical examination, lime-induced phytophotodermatitis was diagnosed.

The patient was discharged with systemic prednisolone and the recommendation of skin hydration and avoidance of sun exposure. A week later, the affected areas showed hyperpigmentation (Fig. 2).

Phytophotodermatitis is a non-immunologic cutaneous reaction caused by contact with some plants and fruits containing phototoxic substances (furocoumarins) which are activated by exposure to ultraviolet A radiation.^{1,2} Carrot, citrus fruits, celery, rue, and fig tree are examples of plants that can induce phytophotodermatitis.¹

The skin lesions usually appear within 24 hours after sun exposure. They can present as erythema, edema, vesicles, and blisters, only on the sun-exposed areas.¹ The acute eruption normally resolves in few days, and then it is gradually replaced by post-inflammatory hyperpigmentation which may persist for weeks or months.²

The diagnosis is challenging and the lesions are often confused with burns, cellulitis, and allergic contact dermatitis. Treatment is mostly symptomatic and includes wound care, analgesia, topical corticosteroids, and sun avoidance.² In severe cases, systemic corticosteroids can be considered.³ Trigger avoidance and patient education are necessary preventive measures.



Figure 1. Skin lesions on right (A) and left (B) hands. Note the linear lesions on the right hand digits.

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Figure 2. Post-inflammatory hyperpigmentation.

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WHAT THIS REPORT ADDS

- Phytophotodermatitis should be considered when a cutaneous reaction appears after contact with some plants or fruits and subsequent sun exposure.
- The diagnosis is clinical, and treatment is mostly symptomatic.
- Post-inflammatory hyperpigmentation may persist for a long period.

Conflicts of Interest

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Confidentiality of data

The authors declare that they have followed the protocols of their work centre on the publication of patient data.

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