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A Case of Recurrent Phytophotodermatitis in a Traveler to the Caribbean

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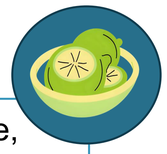
Introduction

- Phytophotodermatitis is a non-immunologic phototoxic reaction
- Caused by skin contact with photosensitizing plant compounds followed by exposure to ultraviolet (UV-A) light

- Classic presentation can range from well-demarcated erythematous linear streaks to ill-defined erythema, vesicles



- It is often triggered by lime or citrus exposure, and is increasingly recognized among travelers to tropical regions

Figure. 1. Presenting rash on patient's hand

Case Presentation

Herein, we describe a case of a 26-year-old male who developed recurrent linear erythematous rashes on his right forearm during annual trips to Barbados, ultimately diagnosed as phytophotodermatitis secondary to lime exposure from mojitos held in his dominant hand.

Case Timeline

Initial Trip

- Within 1 week of arrival → itchy red papule appears on right ulnar wrist
- Lesion spreads linearly down forearm
- Treated with albendazole at local clinic
- Rash resolves in ~5 days within return

Second Trip

- Recurrence with identical pattern and timing
- Again treated empirically for "beach worm" with albendazole at local clinic
- Rash resolved after return

Third Trip

Trip 3 – Barbados

- Recurrence with identical pattern and timing
- Again treated empirically for "beach worm" with albendazole at local clinic
- Rash resolved after return

Tropical Disease Clinic

- Presents to Tropical Disease clinic
- Detailed history and physical exam
- Photos show linear erythema on right forearm
- Diagnosed as recurrent phytophotodermatitis due to lime exposure

Follow-Up

- Advised sun protection and to avoid lime juice on skin in future
- Complete resolution and no recurrence after preventive measures

Learning Points

Epidemiology

- Phytophotodermatitis is a *non-immunologic phototoxic skin reaction* caused by contact with furocoumarins followed by UV-A exposure.
- Furocoumarin is present in limes, figs, parsley, celery and carrots
- More common in travelers to tropical and subtropical regions, where citrus and UV-A exposure are frequent.

Clinical Features & Diagnosis

- Presentation: Linear or irregular erythematous streaks, occasionally with vesicles, bullae, or post-inflammatory hyperpigmentation on sun-exposed areas.
- Symptoms: Itching, burning, or tenderness, typically appearing 24–72 hours post-exposure.
- Diagnostic clue: History of food/drink exposure (particularly lime or citrus exposure)
- Differential diagnoses: contact dermatitis, blister beetle dermatitis, chemical burns, cutaneous larva migrans, or herpes simplex.
- Diagnosis is clinical

Treatment

- Usually self-limiting, resolving within days to weeks.
- Cool compresses, topical corticosteroids, antihistamines, and emollients.
- Severe cases: Manage blistering or necrosis with wound care or referral to specialized burn/dermatology
- Patient education is key to preventing recurrence and avoiding unnecessary antimicrobial or antiparasitic therapy.

Prevention

- Avoid direct contact with citrus, celery, parsley, or other photosensitizing plants before UV-A exposure.
- Apply broad-spectrum sunscreen and wear protective clothing when outdoors.
- Educate travelers on hidden exposures (e.g., lime-based drinks like mojitos or sangria).
- If exposure occurs, wash skin immediately with soap and water to remove photosensitizing compounds.

Contact

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