Outdoor dining causing blisters: think infantile phytophotodermatitis

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DESCRIPTION

A 5-month-old boy was brought to the emergency department in June by his mother, with a 1-day history of a progressive erythematous rash on his face, chest and hands with associated blistering (figure 1). The child was systemically well with no medical history. Detailed history revealed that a day before admission, he had been feeding himself mashed carrots and parsnips while sitting outside in the sunshine wearing only a nappy. As he was a ‘messy’ eater and it was very sunny, he subsequently had his bath outside. His parents first noticed the rash on his right hand the next morning. It progressed during the day to his left hand, face and midchest. By evening, he had developed blisters on his right hand.

On examination, he had a well demarcated, erythematous rash with erosions distributed periorally, centrally on the chest and upper abdomen with small irregular patches on his thighs and shoulders. On his right hand, there were large tense bullae and areas of desquamation (figure 1). The rash was associated with perioral erythema and peripheral streaks in a bizarre configuration consistent with a linear drip pattern (figure 2). There was sparing of his posterior trunk, mucus membranes, palms and soles. Phytophotodermatitis was diagnosed based on the history of outdoor eating in sunshine and the streaky appearance of the rash in a distribution where psoralen containing food came into contact with his skin. The patient responded to treatment with topical betamethasone 0.025% to his chest and limbs, and hydrocortisone 1% to his face. The rash resolved with mild residual hyperpigmentation (figure 2).

Phytophotodermatitis presents with erythema and bullae in an eccentric linear streaky configuration on sun-exposed skin reflecting contact with the psoralen source. It is an important diagnosis as it can masquerade as abuse. Rash characteristics can range from erythema, vesicles or bullae, often healing with hyperpigmentation. The eruption

Figure 2 (A) Rash day 5. Perioral erythema on the face. Irregular patches on the chest with peripheral linear streaks in a bizarre configuration. (B) Mild residual hyperpigmentation remains.

Patient’s perspective

Seeing my son covered in burns was so traumatic for our family. We hope by sharing his case that others will get a quick diagnosis like we did. We were so fortunate that he had a fantastic team caring for him and we received a timely diagnosis and treatment, and as a result, he has been left with no permanent damage, something we were so worried about at the time (statement from the patient’s mother).

Learning points

► Phytophotodermatitis should be suspected when an infant presents with an acute, vesiculobullous eruption in a linear pattern after exposure to sunlight and a psoralen-containing substance such as carrots and parsnips.
► Phytophotodermatitis is a clinical diagnosis. Key to diagnosis is a comprehensive history, focusing on skin exposure to a psoralen and ultraviolet light, coupled with a heightened awareness, especially when there has been recent fine weather.
► The clinician must be aware that this entity exists to avoid misdiagnosis.
occurs within 24 hours of ultraviolet exposure and peaks at 48–72 hours. The lesions have unusual shapes and are often painful but not pruritic and appear only in sun-exposed areas.

Common culprits are giant hogweed, celery and parsley but there are reports of citrus fruits, carrots, parsnip and fennel.

Due to the bizarre configurations of lesions, phytophotodermatitis mimics a variety of different diseases. Differential diagnosis includes polymorphic light eruption, severe sun burn, staphylococcal scalded syndrome, contact dermatitis, infectious exanthema, drug-related rash and non-accidental injury.

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