

patients are mentioned.⁵ This reputation of harmlessness has favored the development of this technique, not only among dermatologists but also among other specialists. Its use today extends beyond the medical field, and several beauty salons also offer LED therapy.

Solar urticaria is a rare form of physical urticaria induced by sun exposure and must be distinguished from other photodermatoses. The condition can be disabling and remains difficult to manage. Our case suggests that solar urticaria is a previously unrecognized side effect of LED therapy that physicians should be aware of. This case also pleads for clinical studies with robust methodologic quality to explore the efficacy and side effects of LEDs in dermatologic indications.

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Cheilitis and urticaria associated with stannous fluoride in toothpaste

To the Editor: A 55-year-old woman presented with recurrent idiopathic urticaria and cheilitis. Her symptoms began 2 years ago following dental work, with intermittent lip swelling and daily hives occurring over 10 months. She received 5- to 7-day tapered courses of 40 mg prednisone on 8 occasions during this time, and her symptoms ultimately remitted spontaneously. Prior allergy workup for urticaria, including patch testing (via TRUE test) was mildly positive only for thimerosal and fragrance. Prick testing for environmental allergens was negative.

One month before initial evaluation, the patient underwent implantation of new dental resin fillings in place of older amalgam fillings. She tolerated lidocaine during the procedure without difficulty. The patient awoke 6 hours later with lip and oral swelling. On presenting to the emergency department, she received epinephrine and intravenous steroids, and completed a course of prednisone. In the weeks thereafter, she continued to experience intermittent lip swelling, facial dermatitis, and urticaria.

She consulted the allergy clinic. Pulmonary function testing revealed normal spirometry; skin prick testing and intradermal testing with lidocaine, mepivacaine, and proparacaine yielded negative results. Based on the temporal correlation between her dental work and symptom onset, the patient was referred for expanded patch testing. Immediate patch testing interpretation to detect urticaria was not performed. Testing results at 96 hours revealed no positive reactions to fragrance or flavoring chemicals. The patient had 1+ methyldibromoglutaronitrile, 1+ lidocaine, 1+ dodecyl gallate, and 1+ tin reactions (Fig 1). Lidocaine was relevant to her episode of oral swelling occurring hours after her dental procedure. The reactions to dodecyl gallate and methyldibromoglutaronitrile were not relevant.

It is possible that the patient's persistent symptoms occurred due to allergy to tin. Her exposures included prior amalgam dental fillings (which typically contain mercury, silver, copper, and tin) and Crest Pro-Health toothpaste with the active ingredient stannous fluoride (Tin (II) fluoride). Upon discontinuation of this toothpaste, the patient's episodic lip swelling and urticaria resolved. She was symptom-free for 8 weeks, when an inadvertent reexposure to the same toothpaste was associated with recurrence of urticaria and lip swelling within a few hours. After subsequent avoidance of the suspected toothpaste, she again experienced remission of symptoms. We postulate that the stannous fluoride in the toothpaste may be the cause of her urticaria, although it is possible that another ingredient, such as a flavoring agent, is responsible.



Fig 1. Patch testing revealing 1+ allergic reaction to tin at 96-hour follow-up.

Metals are commonly associated with allergic contact dermatitis. However, tin has been associated with extremely low reaction rates.¹ Amalgam restorations have been implicated in localized as well as systemic hypersensitivity reactions.^{2,3} To our knowledge, no cases of allergy to stannous fluoride, an agent commonly found in toothpaste and oral rinse formulations, have been published.⁴ Additionally, small studies have suggested that contact allergies may play a role in chronic idiopathic urticaria in a small proportion of patients. Metals, particularly nickel, are the most commonly associated allergens.⁵ Based on our findings, in select patients we suggest that clinicians consider testing for additional allergens beyond standard patch testing series.

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Distinctive cutaneous findings due to a rare complication from a warming device

To the Editor: Perioperative hypothermia is a well-known complication of general anesthesia and has been associated with numerous adverse outcomes: increased intraoperative blood loss, surgical wound infections, cardiac events, and duration of hospitalization. Maintaining patients in perioperative normothermia has become a routine practice with forced-air warming (FAW) devices, such as the Bair Hugger warming blanket (Arizant Healthcare, Eden Prairie, MN), a commonly used device. These devices are generally very safe and complications have largely been limited to misuse, such as directly blowing of warm air onto a patient without a blanket.¹ Rare cases of thermal burns secondary to FAW devices have been reported in children, and only 1 case report of an adult who suffered a first-degree burn.²⁻⁴ We report a unique case of an adult patient who suffered thermal burns secondary to a properly used FAW device.

A 64-year-old man was evaluated as an inpatient dermatology consultation on the surgical floor for bilateral and symmetric vesicles on the medial aspects of his lower legs (Fig 1). His hospital course was significant for a pulmonary isolation surgical procedure the day before presentation. The patient's medical history was significant for cardiomyopathy and obesity (BMI 32.9). At presentation the patient was alert, well appearing, and in no noticeable distress. Examination revealed discrete erythematous intact vesicles approximately 3 to 6 mm in diameter. The lesions were well circumscribed and distributed linearly and regularly, with each vesicle exactly 1 cm apart. They were more extensive on the right leg than the left leg. Palpation elicited great tenderness. Upon further investigation, it was found that the patient had an FAW device placed on both legs during the uneventful procedure, and the pattern distribution of the cutaneous lesions perfectly aligned with the pattern of the ventilation pores found on the device blanket.

These unique cutaneous findings, along with the patient's cutaneous history, led to the diagnosis of superficial partial-thickness thermal burns,