

## UNUSUAL COMPLICATION WITH USE OF AN INSTANT COLD PACK

Instant cold packs provide a convenient cold therapy that can be used to reduce swelling and relieve discomfort from insect bites to sport injuries. These cold packs are commonly used in the allergist's office to alleviate discomfort from allergy injections. Most instant cold packs contain ammonium nitrate and water, two ingredients that, when mixed by squeezing the package, undergo an endothermic reaction and immediately lower the temperature of the product. If used appropriately, instant cold packs are safe and effective. We describe a severe tissue injury caused by an instant cold pack (T-Pak Instant Cold Pack; Cardinal Health, Dublin, Ohio). Although this injury is unusual, it is preventable.<sup>1</sup>

A 33-year-old African American woman undergoing maintenance allergen immunotherapy for allergic rhinitis received an immunotherapy injection to her left upper arm. She developed a small local reaction and was given an instant cold pack, which she held to her arm for 20 minutes. Later, the patient placed the package in a freezer for 10 minutes and reused it on her arm for 20 minutes longer. She repeated this once more. On final removal from her arm, she noticed a 10 × 10-cm area of local erythema with swelling and blisters, which progressively worsened during the next 24 to 48 hours (Figure 1). The patient was treated with prednisone, 30 mg every day for 3 days, and topical silver sulfadiazine 1% cream. The area healed without complications within 7 days.

Chemical cold packs are commonly used in an allergist's office owing to their convenience, safety, and effectiveness. They provide an instant coldness (33°F/0.5°C) that lasts approximately 30 minutes. Frostbite injury due to improper use of dry ice or standard ice therapy has been reported in the literature.<sup>2-6</sup> Errors included prolonged or direct application of the ice to skin. Injury from a chemical cold pack is not commonly described. In this case, inappropriate refreezing of the contents contributed to frostbite injury. Although instructions on the packaging inform the consumer to never refrigerate or freeze the product and to not use it if torn or leaking, many patients may overlook these directions. This may result in frostbite injury or severe contact or chemical dermatitis and unnecessary morbidity. Patient education remains the best preventive method for this injury.

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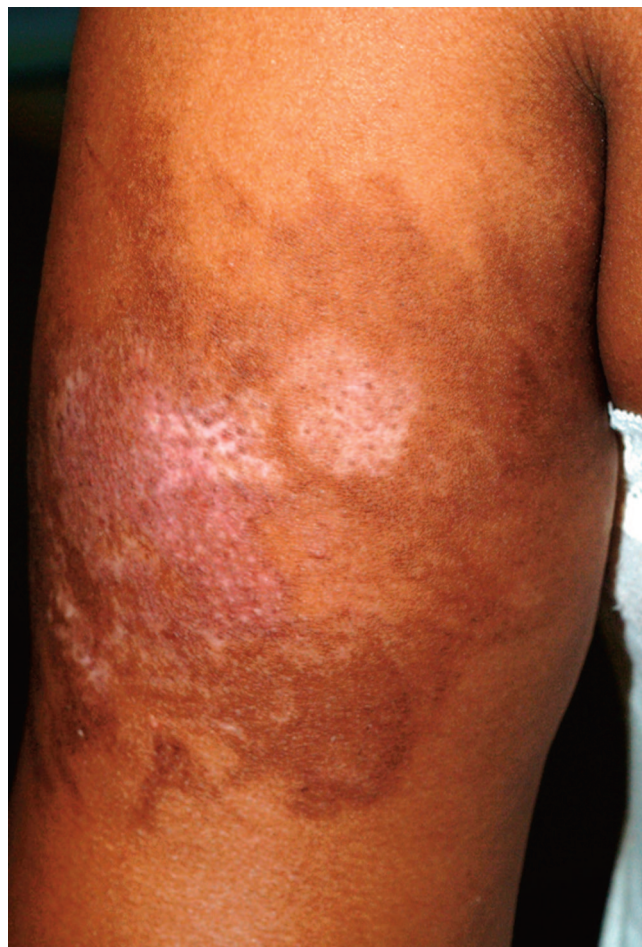


Figure 1. Upper arm showing skin injury 24 hours after applying a cold pack.

## USE OF EPINEPHRINE AUTOINJECTORS FOR TREATMENT OF ANAPHYLAXIS: WHICH COMMERCIALLY AVAILABLE AUTOINJECTOR DO PATIENTS PREFER?

Epinephrine is well established as the drug of choice for managing acute anaphylaxis.<sup>1-4</sup> Currently, EpiPen and Twinject are the only 2 commercially available autoinjectors for treating anaphylaxis. The aims of this study were to determine patient preference between EpiPen and Twinject and to identify reasons patients choose one autoinjector over another in a military patient population where medication cost is not a factor.

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