Symmetrical Pruriginous Nasal Rash

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A 44-year-old man was referred to the department of dermatology for a pruriginous nasal rash. Physical examination revealed vesicles with clear content and crusts symmetrically in both nostrils and philtra. The remainder of the examination was otherwise unremarkable. The patient reported inhalation of poppers the prior night during a party. No history of connective tissue diseases was present. The patient was in overall good health with no fever or chills.

WHAT'S THE **DIAGNOSIS?**

a. bullous lupus erythematosus
b. contagious impetigo
c. herpes simplex virus
d. irritant contact dermatitis
e. periorificial dermatitis

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The authors report no conflict of interest.
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THE **DIAGNOSIS:** Irritant Contact Dermatitis

A slang term for volatile alkyl nitrites, *poppers* are inhaled for recreational purposes. They produce rapid-onset euphoria and sexual arousal, as well as relax anal and vaginal sphincters, facilitating sexual intercourse. Alkyl nitrites initially were developed to treat coronary disease and angina but were replaced by more potent drugs.[1] Because of their psychoactive effects and smooth muscle relaxation properties, they are widely used by homosexual and bisexual men.[1-3] The term *poppers* was originated by the sound generated when the glass vials are crushed; currently, they also may be found in other formats.[1]

Nausea, hypotension, and headache are mild common adverse effects of volatile alkyl nitrites[1]; cardiac arrhythmia, oxidative hemolysis,[4] and poppers maculopathy[5,6] with permanent eye damage also have been reported.[7] On the skin, volatile alkyl nitrites induce irritant contact dermatitis that heals without scarring, characteristically involving the face and upper thoracic region, as they are volatile vapors.[2] However, the reaction can occur elsewhere. There have been reports of contact dermatitis on other locations, such as the thigh or the ankle, due to vials broken while stored in pockets or on the cuff of the socks.[1] There also is a report of irritant contact dermatitis manifesting as a penile ulcer.[3] Albeit rare, allergic contact dermatitis to volatile alkyl nitrites and other nitrites also can occur.[8]

The abuse of alkyl nitrites may increase the risk for sexually transmitted infections (STIs), as they may decrease safer sexual practices and increase the propensity to engage in risky sexual behavior. It has been suggested to screen for STIs in patients with history of volatile alkyl nitrite use. In the past, volatile alkyl nitrites were believed to be a potential vector of human immunodeficiency virus.[9] Other popular drugs used in social context or "club drugs," such as 3,4-methylenedioxymethamphetamine, gamma hydroxybutyrate, methamphetamine, and ketamine, do not produce irritant dermatitis as an adverse cutaneous reaction.[10] The differential diagnosis in our patient included herpes simplex virus and contagious impetigo[1] as well as bullous lupus erythematosus and periorificial dermatitis; however, the clinical picture, acute onset of the reaction, and the patient's medical history were critical in making the correct diagnosis.

The patient was treated with topical hydrocortisone and fusidic acid cream twice daily for 7 days with complete response. Sexually transmitted infection screening was unremarkable. We suggest performing an STI workup on patients with history of volatile alkyl nitrite use.

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