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2021-06

Kluger , N & Frances , P 2021 , ' Unilateral contact dermatitis of the breast caused by amyl
nitrites (poppers) ' , Annales de Dermatologie et de Vénéréologie , vol. 148 , no. 2 , pp. 139 . <https://doi.org/10.1016/>

<http://hdl.handle.net/10138/341404>

<https://doi.org/10.1016/j.annder.2020.08.057>

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Letter to the editor

Unilateral contact dermatitis of the breast caused by amyl nitrites (poppers)

ARTICLE INFO

Keywords:
Breast
Contact dermatitis
Inhaled nitrites
Lymphangitis
Poppers

Inhaled amyl nitrites (or poppers) are a recreational drug used during parties and sexual activities. They induce muscle relaxation, euphoria and heightened sexual sensation [1]. Direct skin contact causes irritant dermatitis, which is usually located on the face and regresses without scarring [1]. However, contact dermatitis may occur in unusual areas in the case of leakage of the vial [2]. We report an unusual case of contact dermatitis localized on the breast of a young adult.

A 23-year-old woman presented in ER with 5-day old cutaneous ulceration of the right breast (Fig. 1). The patient had ‘kept poppers’



Fig. 1. Fibrinous ulceration of the right breast and adjacent lymphangitis.

for her friends. Because of the lack of pockets, she had stored the vial inside her bra. Amyl nitrite solution leaked out of the vial and came directly into contact with her skin. An erythematous patch occurred and rapidly progressed to ulceration. Physical examination showed superficial fibrinous ulceration and linear erythema consistent with lymphangitis. The right breast was painful on manual palpation. Presumed local infection and lymphangitis prompted

initiation of oral antibiotic treatment (amoxicillin and clavulanic acid) and application of chlorhexidine. No bacterial swab was performed. Symptoms improved with treatment. No patch test with amyl nitrite was performed. A final diagnosis was made of irritant (poppers) contact dermatitis complicated with lymphangitis and possible local infection.

Contact dermatitis to poppers usually affects the medio-facial area (nose, mouth, and lips) and presents as an impetigo-like or seborrheic dermatitis-like eruption in regular or intensive users. It usually resolves within 7–10 days after drug discontinuation [1,3]. Unusual localizations have been observed, either by direct contact of the hand with the skin, as illustrated by a case of genital ulceration of the penis or by leakage of the vial through trouser pockets or directly onto the skin [2,4]. Reports of true contact allergic reactions to amyl nitrite or “popper” preparations are rare [5]. The short time to onset of the rash militated in favor of irritant dermatitis rather than allergic contact dermatitis. If a patient does not provide an explanation, thorough history-taking is the only way to identify the causative agent.

Disclosure of interest

The authors declare that they have no competing interest.

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Received 24 May 2020

Accepted 31 August 2020

Available online xxx

<https://doi.org/10.1016/j.annder.2020.08.057>
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