Dermatology Practical & Conceptual

A Case of Acute Contact Dermatitis Caused by Lidocaine/Prilocaine Cream on a Zoon Balanitis

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Case Presentation

A 67-year-old uncircumcised patient presented to our clinic for a reddish shiny well-defined patch on the glans penis mucosa (Figure 1a) present for two years.

Considering the clinical and dermoscopic characteristics (Figure 1c) highly suggestive of Zoon plasma cell balanitis, the patient applied topical steroids for several months, with temporary regression of the lesion followed by a prompt relapse after discontinuation.

Given the lack of remission of the lesion, a skin biopsy with topical anesthesia was performed to exclude neoplastic disease.

A thin layer of lidocaine/prilocaine cream was applied to the lesion and covered with a transparent film dressing. Ten minutes after application, an overlying well-defined erythematous area with some vesicular-bullous lesions was observed (Figure 1b), with no reported local pain, burning, or itching sensations. The histological examination confirmed our initial hypothesis. (Figure 1d-e).

Teaching Point

Although topical anesthetic-induced reactions have already been described, no other report of localized irritant bullous contact dermatitis of the glans penis due to lidocaine/prilocaine anesthetic cream has been documented in the literature.

A limitation of the case described is that patch and prick tests were not performed; however, the onset of the reaction after a short time and its localized nature suggest a direct toxic nature rather than an immune hypersensitivity reaction (1).

It is extremely important to raise awareness among healthcare professionals about the correct and safe use

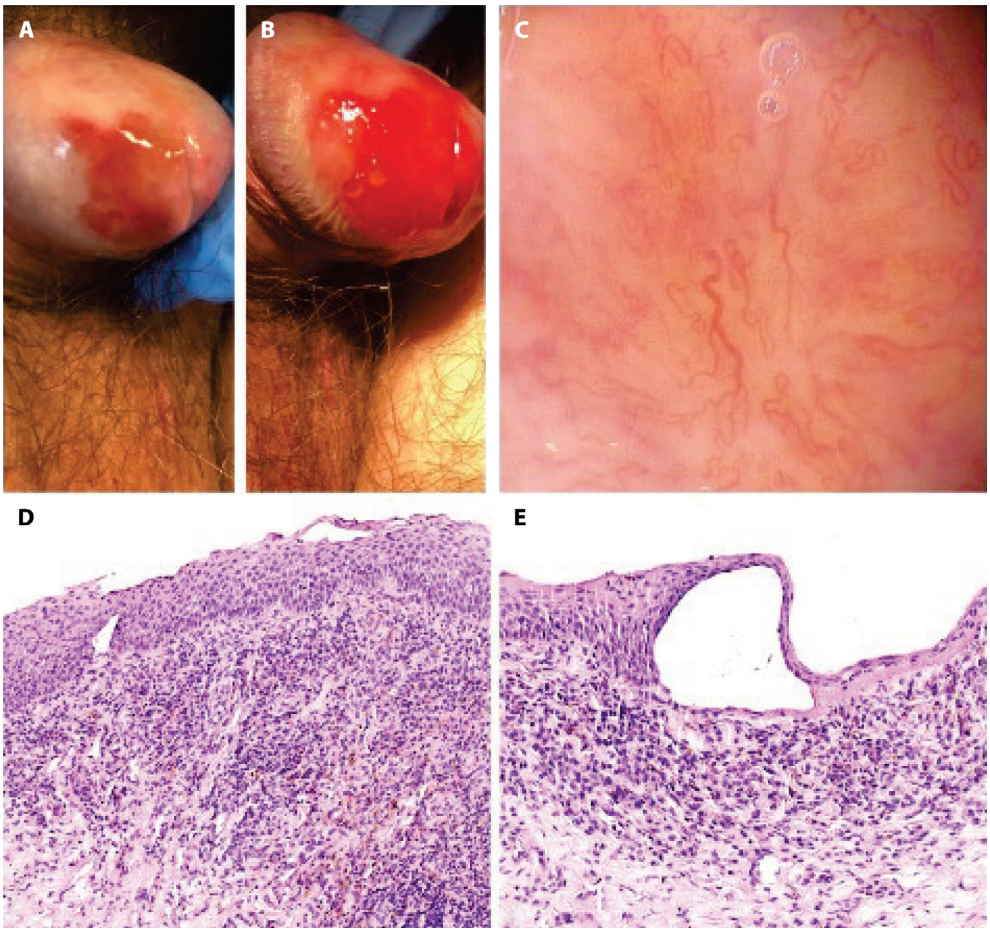

Figure 1. a) Morphology of the glans lesion characterized by a single reddish shiny well-defined patch with a smooth itchy surface before and b) after application of topical anesthesia showing an acute vesicular-bullous reaction; c) Dermoscopic examination displays orange-brown structureless areas with different thickness curved "fire-like" serpiginous and convoluted vessels; d) cutaneous biopsy finding showing a predominantly lymphoplasmacytic band infiltrate, edema, and dilated vessels with numerous hemosiderophages in the chorion (Hematoxylin-eosin stain. Original magnification x20); e) detail of a vesicle and moderate spongiosis at the epithelial level (Hematoxylin-eosin stain. Original magnification x30).

of topical anesthetics, as they can cause unpleasant side effects (2), while pathologists should always be informed about their occurrence, as this could lead to diagnostic bias.

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