

LETTERS

Not all Polysporin products contain lidocaine

This is a letter in response to an article by Colantonio and Kirshen titled “Severe Allergic Contact Dermatitis Due to Polysporin.”¹

The article was about a 28-year-old woman with an allergic contact reaction to Polysporin Complete. The conclusion in the article was that petroleum jelly is preferred over Polysporin, because antibiotic preparations can contribute to allergic contact dermatitis.

It is important to note that the name Polysporin is commonly used by the general population because it refers to Polysporin Antibiotic agents. However, in the marketplace, Polysporin is a brand name that encompasses a wide range of products, which include Polysporin Antibiotic Cream/Ointment, Triple Antibiotic Ointment, Complete Antibiotic Ointment, Kids Cream, Anti-Itch, Antiseptic/Pain Relieving Spray, Plus Pain Relief Cream and Plus Pain Relief Ear Drops. Of these, only Polysporin Complete Antibiotic Ointment, Kids Cream, Plus Pain Relief Cream and Plus Pain Relief Ear Drops contain lidocaine.

The company also produces Polysporin Eczema Moisturizing Cream/Body Wash, 1% Hydrocortisone Anti-Itch Cream, Itch Relief Lotion, Eye/Ear Drops for Pink Eye and Visible Lip Health, none of which contain lidocaine.

In summary, not all Polysporin products contain lidocaine, and a lidocaine allergy alone does not preclude the use of all Polysporin products.

Lidocaine contact allergy is not very common, reported to occur in 1% of patch-tested cases.² However, this allergy carries a risk of a reaction to injected local anesthetics containing lidocaine or other local anesthetics belonging to its chemical amide class, such as bupivacaine, dibucaine, mepivacaine and ropivacaine. In one study, 756 patients were tested with the North American Contact Dermatitis Group standard series, and 13 had a positive patch test to lidocaine.³ Among these, three had a reaction to subcutaneous challenge with lidocaine, none of whom had positive test results on intradermal testing. The risk of anaphylaxis is not a concern because allergic contact dermatitis is a delayed type IV hypersensitivity reaction.

Perhaps of more importance, chronic usage of topical antibiotics carries a substantial risk of contact sensitization to the antibiotic ingredients themselves. In a study by Zaki and colleagues, 85 patients with either chronic venous ulcerations or eczema complications on leg ulcers underwent patch testing to common topical antibiotic agents, including neomycin, gentamicin, gramicidin, framycetin, bacitracin, polymyxin b, oxytetracycline, sodium fusidate and mupirocin.⁴ The highest sensitizations

were to bacitracin (22%), neomycin (21%), framycetin (20%) and polymyxin b (12%).

Ideally, any suspected allergic contact dermatitis reaction to a topical agent should prompt patch testing to medicinal and non-medicinal ingredients in the product. Once the culprit is identified, the practicality of avoiding the agent(s) should be discussed with the patient. In this situation, information regarding potential allergy to lidocaine injections in the setting of suturing lacerations, skin biopsies or local freezing by dentists should be reviewed with the patient.

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