

Slime dermatitis

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A previously healthy girl aged 10 years presented to the pediatric dermatology clinic with a 1-week history of an itchy eruption on the hands bilaterally. She had a similar eruption 6 months earlier after playing with homemade “slime” made with sodium borate (borax). On the day of the eruption, she was playing with slime that she had received from a friend.

On physical examination, she had erythematous scaly plaques and firm papules on the bilateral palmar surfaces of her hands, with involvement of the dorsal and ventral surfaces of the fingertips (Figure 1). We diagnosed slime dermatitis.

Rising interest in homemade slime, fuelled by social media and proponents of slime as a sensory play tool, has led to increasing reports of hand dermatitis and even chemical burns in children. Although most cases have been reported in online forums and by news outlets, there are increasing numbers of case reports in the medical literature.¹ We highlight this case to raise awareness about this common and preventable condition.

Popular slime recipes suggest mixing borax, glue and water; other recipes also contain polyvinyl alcohol, baking soda, milk or cornstarch.² Sodium borate is a known contact irritant,³ which can cause dermatitis and local tissue injury, particularly if applied to abraded, denuded or burned skin.

Clinical manifestations of slime dermatitis may mimic atopic dermatitis, dyshidrotic eczema or other forms of allergic and irritant contact dermatitis. The diagnosis is made largely by visual inspection and exposure history. Management includes avoiding the causative agent, wearing gloves when playing with slime, handwashing after contact and a short course of topical corticosteroids with frequent emollient application.¹

With the rising use of homemade slime, slime dermatitis is an important entity to include in the differential diagnosis of new-onset hand dermatitis in children.



Figure 1: Erythematous scaly plaques and firm papules on the palmar surface of the hands of a 10-year-old girl who had played with home-made slime.

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