

BRIEF REPORT

Contact dermatitis to training toilet seat (potty seat dermatitis)

Abstract

Allergic contact dermatitis from various components of toilet seats has been well described. We report a case of a young boy presenting with an atypical pattern of dermatitis who was found to be allergic to his training toilet seat. This case highlights the importance of recognizing this diagnosis and the role of potty seats as the causative factor.

1 | CASE REPORT

A 3-year-old Caucasian boy presented to the pediatric dermatology clinic with a 6-month history of a pruritic rash affecting his buttocks and upper thighs. He was treated with multiple low-potency topical corticosteroids and topical antibiotic and antifungal agents, without improvement. His medical history was pertinent for atopic dermatitis that had previously been well controlled.

Physical examination revealed multiple erythematous, scaly, symmetrical plaques on the buttocks and bilateral posterior thighs (Figure 1). He was treated for suspected contact dermatitis, but the pattern was noted to be atypical and not specific. The rash initially responded to triamcinolone 0.025% cream twice daily but worsened and recurred quickly without therapy. Treatment was then escalated to flucinonide 0.05% ointment twice daily alternating with tacrolimus 0.03% ointment, and later to augmented betamethasone dipropionate 0.05% ointment twice daily because of frequent flaring. Disposable paper toilet seat covers were also used in treatment, with only mild improvement. When the patient's mother went to purchase a new potty seat (Prince Lionheart WeePod Basix) from an online retailer, numerous consumer product reviews detailed similar rashes and even displayed photographs of rashes identical to her sons.¹ She immediately discontinued use of the seat. Complete resolution of lesions was achieved after 1 month of nonuse. A report to the Consumer Product Safety Commission was made.

2 | DISCUSSION

Allergic contact dermatitis (ACD) to toilet seats is becoming increasingly common. The causative allergens are varied. Wood had previously been the most common cause of toilet seat contact dermatitis,^{2,3} but incidence declined after replacement of wooden seats with plastic alternatives. Other allergens reported include polypropylene³ and polyurethane foam in a worn leather seat.⁴

In this case, the diagnosis of ACD to a training toilet was not clear, because the pattern of the lesions was atypical and irregularly distributed on the buttocks and posterior and medial thighs, probably because of the small, round shape of the seat and the squirmy behavior of a toddler. The classic arciform distribution was not observed. The use of paper covers did not provide relief, because they did not completely cover the seat.

The parents declined patch testing because the rash resolved with discontinuation, so the specific component of the polyurethane that was the allergen was not confirmed. Polyurethanes are synthetically produced polymers that contain isocyanates and often the curing agent diaminodiphenylmethane.^{4,5} The possibility of allergy to the additive dyes used was considered, but rashes have been reported in all four colors available. Reports of cracking of the potty seat suggest the possibility of an irritant dermatitis due to cleansers, but the mother and several reviews noted that they did not use harsh cleanser, just soap and water. There are more than 30 other customer reviews of this same product with markedly similar rashes, as well as a warning on the manufacturer's website but not the online retailer. It is important for practitioners to be on the alert for contact dermatitis to potty seats,



FIGURE 1 Erythematous, excoriated, discrete plaques involving the buttocks and upper inner thighs

recognizing the atypical pattern and reporting to the Consumer Product Safety Commission.

Keywords

allergy, contact dermatitis

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