

Toilet seat dermatitis – a case report

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Introduction

Toilet seat dermatitis was first described in 1927 by Mackee, who stated that it was a form of contact dermatitis occurring on the gluteal area and thighs coming in contact with the toilet seat¹. The lacquer, varnish, hardwood substances, or volatile oils present in wooden toilet seats could have caused sensitization and development of allergic contact dermatitis. When plastic seats and toilet seat covers were used in the 1980s and 1990s, the incidence of toilet seat dermatitis dropped. Later, due to the use of harsh detergents²⁻⁴ and exotic wood seats⁵⁻⁷, there have been more toilet seat dermatitis cases. However, in India, due to the Indian style squat toilet's extensive usage, there is no contact with any toilet seat, toilet seat dermatitis was rare. But with recent extensive use of the western-style toilet, portable toilet seats for children along with usage of harsh detergents, there are more chances of developing toilet seat dermatitis.

Case Presentation



Figure 1. Erythematous plaque over post thighs.

A 5-year-old male single child born of a non- consanguineous marriage presented to our

OPD with complaints of itchy lesions over the lower buttocks and posterior thighs noticed for the last three weeks. (Fig 1) The child is a known case of atopic dermatitis in the past one month of age. The mother had a history of wheezing.

No similar complaints in any of the other family members. The developmental history was normal. No record of any other major childhood trauma, illness, or surgery. No history of any systemic complaints.

A western-style porcelain toilet seat was used at home with a plastic seat cover. Detergents were used to clean the toilet seats regularly. No toilet seat cover was used. On examination, erythematous scaly excoriated papules were seen over the posterior thighs and the lower gluteal area. These are the areas that come in contact with the toilet seat. No lesions were seen elsewhere. The systemic examination was normal. A diagnosis of toilet seat dermatitis was made, and the child was treated with topical corticosteroids, emollients, and antihistamines. The mother was advised to avoid harsh cleansers, to clean the toilet bowl and seat every day, and to use toilet seat covers or newspapers to prevent direct contact of the toilet seat with the skin. The lesions resolved entirely in two weeks.

Discussion and conclusion

Toilet seat dermatitis can be an allergic or irritant contact dermatitis. Previously when wooden toilet seats were used, allergic contact dermatitis was seen to the varnishes, lacquers², or Sudan stain⁵ present in the wooden toilet seats. Polyurethane toilet seats have also been reported to cause allergic contact toilet seat dermatitis due to isocyanates' reaction⁹.

Recently an upsurge of irritant contact dermatitis is being observed due to extensive use

of harsher chemicals, especially in public washrooms. Quaternary ammonium compounds¹⁰ (didecyl dimethyl ammonium chloride and alkyl dimethyl benzyl ammonium chloride), phenol, and formaldehyde¹¹⁻¹² have been proven to cause irritant contact dermatitis. Alkaline compounds are more likely to cause skin irritation than acidic compounds as they disturb the normal skin's acidic pH¹³⁻¹⁵. Superinfection with *Staphylococcus aureus* may also be seen, especially in an atopic individual needing treatment^{2,16}.

Toilet seat dermatitis may be mistaken for dermatophytoses or some other dermatoses. It may be treated with topical antifungals or further washing of the area, leading to the condition². Patch testing is usually negative in case of irritant contact toilet seat dermatitis². Commercial cleansers used in public restrooms have more irritating potential than those used for household purposes¹⁷. This was corroborated by the aggravation of toilet seat dermatitis during school days and relief during holidays².

The treatment of toilet seat dermatitis is topical steroids and emollients. Systemic antibiotics might be needed in case of secondary infection. The treatment remains the same irrespective of whether it is irritant or allergic contact dermatitis. Stronger cleaners must be avoided, and instead, vinegar, alcohol, or hydrogen peroxide could be used. Toilet seat covers or newspapers could be used while using public washrooms. Prolonged sitting in the washroom should be avoided². Usage of wooden toilet seats be avoided, and plastic seats must be preferred.

Pediatricians, physicians, and dermatologists should suspect toilet seat dermatitis when an atopic child presents with itchy lesions over the posterior thighs or the buttocks

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