



A CASE REPORT OF TOILET SEAT DERMATITIS


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ABSTRACT

Toilet seat dermatitis is a contact dermatitis involving the posterior thighs and the gluteal region resulting from contact with toilet seats. It was commonly seen with wooden toilet seats. It is more frequently seen on usage of public toilets where harsher cleansers are used. Here we describe a case of pruritic symmetrical erythematous eruption over the posterior thighs and the lower gluteal area in a 5 year old atopic boy.

Key words: Toilet seat dermatitis, Contact dermatitis, Irritant dermatitis.

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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 seat [1]. The lacquer, varnish, hard wood 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 detergents [2-4] and exotic wood seats [5-7], there have been more cases of toilet seat dermatitis. However in India due to the wide usage of the Indian style squat toilet in which there is no contact with any toilet seat, toilet seat dermatitis was a rare condition. But with recent extensive usage 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.

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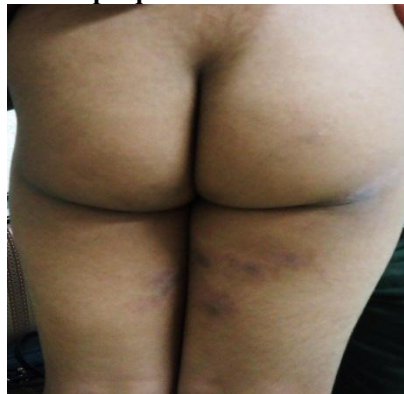
CASE PRESENTATION

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 since the last 3 weeks. The child is a known case of atopic dermatitis since 1 month of age. The mother had history of wheezing.

No similar complaints in any of the other family members. The developmental history was normal. No history 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 which come in contact with the toilet seat. No lesions were seen elsewhere. 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 avoid direct contact of the toilet seat with the skin. The lesions resolved completely in two weeks.

Figure 1. Erythematous papules and plaques seen over the lower buttocks and posterior thighs



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, lacquers [2] or Sudan stain [5] present in the wooden toilet seats. Polyurethane toilet seats have also been reported to cause allergic contact toilet seat dermatitis due to reaction of isocyanates [9].

Recently an upsurge of irritant contact dermatitis is being observed due to extensive use of harsher chemicals especially in public washrooms. Quaternary ammonium compounds [10] (didecyl dimethyl ammonium chloride and alkyl dimethyl benzyl ammonium chloride), phenol and formaldehyde [11-12] have been proven to cause irritant contact dermatitis. Alkaline compounds are more likely to cause skin irritation compared to acidic compounds as they disturb the normal skin's acidic pH [13-15]. 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 and may be treated with topical antifungals or further washing of the area leading to aggravation of the condition [2]. Patch testing is usually negative in case of irritant contact toilet seat dermatitis [2]. Commercial cleansers used in public restrooms have more irritating potential than those used for household purpose [17]. This was corroborated by the

aggravation of toilet seat dermatitis during school days and relief during holidays [2].

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 cleansers 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 avoided [2]. Usage of wooden toilet seats be avoided and plastic seats must be preferred.

Pediatricians 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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CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest.

STATEMENT OF HUMAN AND ANIMAL RIGHTS:

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

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