

A Bum Deal From Wooden Toilet Seats: Reemergence of Allergic Contact Dermatitis

To the Editor:

We report a case series of 5 patients who were found to have an allergic contact dermatitis (ACD) to their wooden toilet seats. The patients presented to our contact dermatitis clinic during a 5-year period from 2005 until 2010. In each case, there was a regional eczematous eruption localized to the buttocks and posterior upper thighs with an annular configuration that matched to the shape of the patients' toilet seats (Fig. 1).

Two of the patients were children, one of whom has been reported previously,¹ and the age range was from 3 to 70 years. In 1 child, a relapse of the rash was associated with extended contact with their wooden toilet seat because of subsequent constipation.¹ All 5 patients had positive reactions on patch testing to wood shavings from their toilet seats. A scalpel was used to take scrapings from the varnish coating and from the wood below the coating. Each set of scrapings was prepared at 10% in white soft paraffin for patch testing. The reactions were typically moderate in severity (++) at day 4 (Fig. 2). Two



Figure 1. Annular eczematous eruption on the buttocks and posterior thighs matching the shape of the patient's toilet seat.



Figure 2. Positive patch test reaction to wood shavings from the patient's toilet seat.

of the patients were patch tested to shavings from their toilet seat's varnish, and this was negative in both cases. There were no other relevant positive results on patch testing each patient to a modified British Contact Dermatitis Society standard series, including negative results to colophony. In all cases, the localized eczema resolved by switching to a plastic toilet seat or by revarnishing the wooden seat.

Microscopic examination of a toilet seat sample from one of the patients confirmed not to react to the surface varnish was undertaken. The wood had distinct growth rings and was diffuse porous, with abundant small vessels in radial multiples, small mainly opposite intervessel pitting, scalariform perforation plates with 14 to 23 bars, and uniseriate homocellular rays between 4 and 35 cells high. These characters indicated that the wood was *Alnus* species, alder, and reference microscope slides were a good anatomical match. This type of wooden toilet seat is available for purchase. *Alnus glutinosa* has been found to cause dermatitis of the face and hands in several reports, probably due to wood rather than bark exposure.² Analysis of the remaining wooden toilet seats in our case series was not performed; these were described as pine in 2 cases, mahogany medium-density fiberboard in 1 case, and unknown in the other.

Toilet seat ACD had been in decline following the replacement of wooden seats with preformed plastic alternatives in the 1960s and 1970s, there being only 1 case report of ACD to a plastic toilet seat.³ Polyurethane foam, contained within a worn leather toilet seat, has also been reported as a cause of ACD.⁴ However, the popularity of wooden seats has increased again, and so there may well be a concomitant rise

Address reprint requests to John R. Ingram, DM, 3rd Floor Glamorgan House, University Hospital of Wales, Heath Park, Cardiff, CF14 4XW, United Kingdom. E-mail: ingramjr@cardiff.ac.uk.

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in cases. Patch testing to toilet seat shavings, to both the wood and any surface coatings, is the optimal investigation in the context that irritant contact dermatitis is also possible.⁵ It remains to be seen whether any particular wood species will predominate in terms of increased allergenicity in the context of this condition.

John R. Ingram, DM
Department of Dermatology and Wound Healing
Institute of Infection and Immunity
Cardiff University
Cardiff, United Kingdom

Peter Gasson, PhD
Jodrell Laboratory
Royal Botanic Gardens
Kew, London, United Kingdom

T. Meirion Hughes, BM, BS
Natalie M. Stone, BM, BS
Department of Dermatology
Royal Gwent Hospital
Newport, United Kingdom

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