Contact Dermatitis

Volume 57 Issue 6 Page 383-384, December 2007

To cite this article: Helen Robertshaw, Barbara Leppard (2007)
Contact dermatitis to triclosan in toothpaste
Contact Dermatitis 57 (6), 383–384.

Full Text

Contact dermatitis to triclosan in toothpaste

- **Helen Robertshaw**\(^1,2\) Royal Bournemouth & Christchurch Hospitals, Dorset, UK\(^2\) Southampton University Hospitals Trust, Tremona Road, Southampton, Hampshire SO16 6YD, UK
  Dr Helen Robertshaw
  Dermatology Resource Unit
  Christchurch Hospital
  Christchurch
  Dorset BH23 2JX
  UK
  Tel: +44-1202-70-5457
  e-mail: helen.robertshaw@rbch.nhs.uk

- **Barbara Leppard**\(^2\) Southampton University Hospitals Trust, Tremona Road, Southampton, Hampshire SO16 6YD, UK
  \(^1\) Royal Bournemouth & Christchurch Hospitals, Dorset, UK \(^2\) Southampton University Hospitals Trust, Tremona Road, Southampton, Hampshire SO16 6YD, UK

Dr Helen Robertshaw
Dermatology Resource Unit
Christchurch Hospital
Christchurch
Dorset BH23 2JX
UK
Tel: +44-1202-70-5457
e-mail: helen.robertshaw@rbch.nhs.uk

A 52-year-old woman presented to our department with a 2-year history of a blistering eruption on the buccal mucosa and lips after using certain toothpastes. She believed that she was allergic to fluoride, as it was an ingredient in all the toothpastes that had caused her problems.

She was patch tested (with the standard original system) to the British standard battery, the dental battery, her own toothpaste, Active Natural Toothpaste and later to the components of Active Natural Toothpaste. Patch test results showed (at 48 hr and 96 hr) a positive reaction to Active Naturals Total Care Toothpaste (++) and a very strong positive reaction to trichlosan 2% (+++). There was no reaction to fluoride or any other constituents of the toothpaste. 2% trichlosan was applied to the next 20 patients being patched tested but no other patients reacted to it.
Trichlosan (trichloro-hydroxy-diphenyl ether; Irgasan 3565; Irgasan DP 300) is an antimicrobial agent, which has been used for more than 20 years in detergents, soaps, shampoos, deodorants and cosmetics at concentrations usually below 0.5%. It has previously been thought to have a low sensitizing potential with the prevalence of contact dermatitis being found to be low (1, 2). In the early 1990s, trichlosan began to be incorporated into a variety of toothpastes as an antimicrobial agent, with the aim of reducing plaque formation and gingivitis. It is generally combined with a copolymer to aid slow release and/or with another antimicrobial agent, zinc citrate, to increase its clinical efficacy and has been shown to reduce bacterial salivary counts and reduce gingivitis. It has activity against many types of oral bacteria and yeasts. Contact sensitivity to trichlosan was first reported in 1975, from deodorant foot powder and a deodorant stick (3). Since then, there have been several case reports of contact sensitization from an antiperspirant spray (4), a steroid-antibiotic combination cream (Logamel – no longer available) (5) and antibacterial hand washes (6) This is as far as we are aware, the first reported case of trichlosan contact sensitivity from toothpaste. Our patient was commenced on trichlosan-free toothpaste and has had no further problems.