Author/s:
Dear, K;Nixon, R;Ricciardo, B

Title:
Post-operative rashes in the orthopaedic ward caused by allergic contact dermatitis to Dermabond Prineo

Date:
2020-07-01

Citation:
Dear, K., Nixon, R. & Ricciardo, B. (2020). Post-operative rashes in the orthopaedic ward caused by allergic contact dermatitis to Dermabond Prineo. ANZ Journal of Surgery, 90 (7-8), pp.1529-. https://doi.org/10.1111/ans.16009.

Persistent Link:
https://hdl.handle.net/11343/275964

Dear Kate (Orcid ID: 0000-0002-0302-8848)

2

Title: Post-operative rashes in the orthopaedic ward caused by allergic contact dermatitis to Dermabond® Prineo®

Authors: Dr Kate Dear (MbChb, BSc)[1], Associate Professor Rosemary Nixon[1], Dr Bernadette Ricciardo[2]

Authors Affiliations:

1. Occupational Dermatology Research and Education Centre, Skin Health Institute, Melbourne, VIC
2. Fiona Stanley Hospital, Murdoch, WA

Corresponding author's full contact details:

Name: Dr Kate Dear

Address: Skin Health Institute, Level 1/80 Drummond Street, Carlton, VIC 3053

Email: kdear@skinhealthinstitute.org.au

Abstract: Not required

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1111/ans.16009

Main text:

To the Editor,

We wish to highlight the increasing number of cases of allergic contact dermatitis (ACD) to Dermabond® Prineo® (Ethicon, US LLC), an adhesive containing 2-octyl cyanoacrylate used for superficial skin closure after orthopaedic surgery. The first case of ACD to Dermabond® was reported in 2008,[1] and 28 of 57 subsequent cases have occurred following orthopaedic surgery.

Dermabond® Prineo® contains the same glue, with a self-adhesive polyester mesh containing benzalkonium chloride, a known allergen.[2] Since introduction five years ago, there have been 42 cases of ACD, 33 in orthopaedic patients.

We recently reported a case series of ACD to Dermabond® Prineo® from Perth, where all six cases were patch tested, confirming the diagnosis of ACD to Dermabond Prineo®.[3] Four had prior exposure to Dermabond® Prineo®, one to Dermabond® liquid adhesive and one had no known exposure to Dermabond® products. In our series, ACD sometimes caused prolonged hospitalization

It is imperative to convey to all healthcare professionals using Dermabond® Prineo® that development of ACD may occur following its use, particularly in patients who have been exposed to it before. ACD usually presents within 2 weeks of application with a pruritic, eczematous (red, scaly), peri-incisional rash, sometimes with blistering. It can be mistaken for infection and should be suspected in any systemically well patient with a localised pruritic eruption.

We suggest that all patients, in whom it is proposed to use Dermabond® Prineo®, are asked whether they have developed a skin reaction to it previously. If there has been a skin reaction, it should not be used again. Patients without a history of skin reaction should be patch tested to a small amount

of the glue under occlusion, left in place for 48 hours and evaluated then and after 48 hours, prior to further use, to there is no delayed allergic reaction on re-exposure.

Acknowledgements: None

Disclosure statement: No conflict of interest stated.

References:

1. Hivnor C, Hudkins M. Allergic contact dermatitis after postsurgical repair with 2-octylcyanoacrylate. *Arch Dermatol*. 2008; 144(6):814-5.
2. Isaac J, Scheinman P. Benzalkonium Chloride: An Irritant and Sensitizer. *Dermatitis*. 2017; 28: 346-52.
3. Ricciardo B, Nixon R, Tam M, Radic R, Ricciardo B. Allergic Contact Dermatitis to Dermabond® Prineo® Following Elective Orthopedic Surgery: a case series. *Orthopedics*. Accepted for publication 8th October 2019 (ORTHO-2019-309R1)