

Testing to Dermabond® pre-operatively to reduce the likelihood of allergic skin reactions

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Dear Editor,

We wish to highlight the importance of pre-operative scratch patch testing (SPT) in patients where Dermabond® (Ethicon®, USA) has been used previously to close wounds, unknowingly causing sensitisation leading to allergic contact dermatitis (ACD) with subsequent exposure.

Our group has reported on the increase of reports of ACD to Dermabond Prineo®.¹ Previously, cyanoacrylates were not thought to be allergenic, but there have been more cases observed in recent times.²

However conventional patch testing (PT) may not always be adequate.³ It was reported that 19% of patients suspected of having ACD to Dermabond® did not have positive reactions on PT. In an unusual move, scratching the skin prior to PT, presumably allowing increased allergen penetration, was required to elicit positive reactions.⁴

We report the case of an 18-year-old female who presented with post-operative contact dermatitis at the surgical site (Fig. 1) a week following an anterior cruciate ligament (ACL) repair. Previously she had an ACL repair on the contralateral leg with no complications. Dermabond® had been used during both operations to achieve wound closure.





Fig 1

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(a) Post-operative rash to Dermabond®. (b) Positive reaction to scratch patch testing.

Surprisingly, PT to Dermabond® was negative, however SPT resulted in a positive reaction (Fig. 1).

The development of ACD following Dermabond® use is not uncommon in patients with previous exposure. We recommend all patients, in whom Dermabond® may be used, are asked about previous Dermabond® skin reactions. Dermabond® should not be used in patients with a prior reaction. However, patients without a history of a cutaneous reaction should undergo SPT. This involves scratching the skin with a sterile lancet and applying a small amount of Dermabond® directly under occlusion. This is left in place for 48 h and then evaluated, with a further reading at 48 h. If testing is negative, then it is likely that it is safe to use the glue.

Conflict of interest

KP, AS and RN declare no conflicts of interest. Informed consent was obtained from the patient.

Author contribution

Kajal Patel: Conceptualization; writing original draft. **Andrew Shimmin:** Writing review editing. **Rosemary Nixon:** Conceptualization; supervision; writing review editing.

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Data availability statement

Data sharing is not applicable to this article as no datasets were generated or analysed during the current study.

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