



**FIGURE 1.** Ill-defined erythematous patches in the lower central abdomen where Surgimesh XB was placed.

we believe are the first reported cases after ventral hernia repair using Surgimesh XB. Differential diagnoses for RTE include contact dermatitis, tinea corporis, cellulitis, and wound infection; in the postoperative setting, specifically, RTE can be easily confused with infection. A meticulous clinical evaluation with appropriate patient history documenting the prior hernia repair using mesh and confirmatory benign physical findings would allow correct diagnosis of RTE. The lesions will either persist or spontaneously resolve. A short course of topical steroids may be beneficial in alleviating pruritus; however, most cases are asymptomatic.

We highlight these cases to make readers aware of this unique entity and its benign reactive nature. The diagnosis can be elucidated on clinical grounds, thus avoiding unnecessary treatment of infection or other diagnosis. To date, we have only seen this reactive process with this specific mesh, Surgimesh XB, but cannot say if this is a brand- or class-specific reaction.

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## REFERENCES

1. Le Huu Nho R, Mege D, Ouasssi M, et al. Incidence and prevention of ventral incisional hernia. *J Visc Surg* 2012;149(5 Suppl):e3–e14.
2. Aneja S, Taylor JS, Billings SD, et al. Post-implantation erythema in 3 patients and a review of reticular telangiectatic erythema. *Contact Dermatitis* 2011;64(5):280–288.

3. Inzinger M, Tilz H, Komericki P, et al. Heat-triggered reticular telangiectatic erythema induced by a spinal cord stimulator. *Mayo Clin Proc* 2013; 88(1):117–199.
4. Optimal Design...Optimal Outcome: Surgimesh XB Brochure Guide. [BG Medical Web site]. October 2013. Available at: <http://www.surgimesh.com/images/pdf/SurgiMeshXBBrochureRev2Fnl-13Jun11.pdf>. Accessed August 28, 2013.
5. Wiecek, William. Aspide Medical's Surgimesh XB. August 18, 2008. Available at: [http://www.accessdata.fda.gov/cdrh\\_docs/pdf7/K072974.pdf](http://www.accessdata.fda.gov/cdrh_docs/pdf7/K072974.pdf). Accessed August 29, 2013.

## Allergic Contact Dermatitis to Dermabond (2-Octyl Cyanoacrylate) After Total Knee Arthroplasty

*To the Editor:*

Dermabond (2-octyl cyanoacrylate) has been used effectively as a topical skin adhesive at our institution for total joint replacement surgeries since 2006. After its adoption as the standard for wound closure, surgeons began to note the development of an erythematous pruritic papular rash surrounding the incision site within 1 to 3 weeks postoperatively. This response had never been seen at this institution before the initiation of the use of skin adhesives, implicating Dermabond as the likely source of the allergic contact dermatitis (ACD). With an increase in the use of Dermabond, there have been case reports in the literature suggesting contact allergy to Dermabond, but no study patch tested patients using both T.R.U.E. TEST and Dermabond.<sup>1–3</sup> Gonzalo-Garijo et al<sup>4</sup> published a similar case series, in which patients were patch tested with contact allergens related to the surgical procedure.

One surgeon performed 912 total knee arthroplasties (TKAs) from 2006 to 2008 with 15 of these patients (1.7%) developing a rash surrounding their surgical site. It varied from a few erythematous papules with minor itching to the development of vesicles and bullae (Fig. 1). The 15 patients that demonstrated a reaction to Dermabond after TKA were asked to undergo patch testing to determine if they were allergic to Dermabond and to 28 other allergens using the T.R.U.E. TEST. Three patients agreed to participate.

This report is the first study in which patients with a suspected ACD postoperatively had patch testing using the T.R.U.E. TEST and Dermabond. None of the patients had a previous allergic reaction to any skin adhesives. A potential skin

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The authors have no funding or conflicts of interest to declare.

DOI: 10.1097/DER.0000000000000018

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**FIGURE 1.** Allergic contact dermatitis on a patient status post TKA of the right knee with an erythematous papular eruption.

infection was ruled out with negative culture results because ACD to Dermabond can mimic a cutaneous infection. One patient's biopsy demonstrated spongiotic dermatitis with a perivascular lymphocytic infiltrate and numerous eosinophils, favoring a hypersensitivity reaction seen with ACD.

Two of the 3 patients that were patch tested developed a positive reaction to Dermabond.

All materials used during the TKA were reviewed, and Dermabond was the only addition. No rash had developed until Dermabond was added to the surgical procedure.

The rash cleared with topical steroids within 2 weeks in all 15 cases and never recurred. This eliminated the Simplex Bone Cement (polymethyl methacrylate) or the metal implant as the cause of the rash because it would have remained as long as the bone cement and/or the metal were present. In the 4-year follow-up, there has been no recurrent rash. There is no loosening of the joint or need for further joint replacement, which further eliminates the polymethyl methacrylate as a cause.

Despite the nearly 2% incidence of delayed hypersensitivity reaction to Dermabond, this method of wound closure will continue to increase because of its benefits and patient satisfaction, which overcome the potential risk of ACD. Because Dermabond is increasingly adopted as the standard wound closure in many joint replacement centers, allergic reactions should be considered and recognized early, as this is an easily treatable condition.

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## REFERENCES

1. Hivnor CM, Hudkins ML. Allergic contact dermatitis after postsurgical repair with 2-octyl cyanoacrylate. *Arch Dermatol* 2008;144(6):814–815.
2. El-Dars LD, Chaudhury W, Hughes TM, Stone NM. Allergic contact dermatitis to Dermabond after orthopaedic joint replacement. *Contact Dermatitis* 2010;62:315–317.
3. Perry AW, Sosin M. Severe allergic reaction to Dermabond. *Aesthet Surg J* 2009;29:314–316.
4. Gonzalo-Garijo AM, Pérez-Calderón R, Pérez-Rangel I, et al. Contact dermatitis after orthopaedic surgery. *Contact Dermatitis* 2009;61:299–300.

## Allergic Dermatitis From Cyanamide for Chronic Alcoholism Detoxification

*To the Editor:*

Cyanamide is an organic amide used in a variety of fields. In clinical practice, cyanamide (carbimide or calcium carbimide) is mostly used for the treatment of patients with alcohol dependence because of the effect on ethanol metabolism through inhibition of aldehyde dehydrogenase.<sup>1</sup> We here describe 2 cases of allergic dermatitis induced by calcium carbimide for the treatment of chronic alcoholism.

A previously healthy 43-year-old woman presented with repeated episodes of pruritic, erythematous scaly lesions on the left forearm and hand over the last year. No history of atopy was recorded. The lesions cleared after 10 days of topical corticosteroid treatment. The patient denied the use of any drugs or substances, but she eventually admitted manipulation of ampoules of calcium carbimide (Colme; Faes Farma, Madrid, Spain) and spillage a few times when opening the ampoules and preparing the drops for the treatment of her husband's alcoholism.

The second patient was a 56-year-old woman with pityriasis rubra pilaris for 20 years. She developed erythematous eczematous lesions on some areas of her trunk and extremities 2 weeks after she started a daily alcoholism treatment with calcium carbimide (Colme). The lesions resolved after discontinuation of calcium carbimide and topical treatment with steroids and oral antihistamines.

The 2 patients were patch tested with the standard series of the Spanish Contact Dermatitis and Skin Allergy Research Group and 10% aqueous solution of Colme. Both patients had a positive skin test reaction at days 2 and 4. All clinical

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The authors have no funding or conflicts of interest to declare.

DOI: 10.1097/DER.0000000000000017

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