

## Allergic contact dermatitis at the epidural catheter site due to Mastisol® liquid skin adhesive

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### To the Editor,

We report an adverse skin reaction resulting from the application of Mastisol® Liquid Adhesive (Ferndale Laboratories Inc., Ferndale, MI, USA), a topical skin adhesive frequently applied to help secure perineural catheters.<sup>1,2</sup>

A 69-yr-old woman underwent placement of an epidural catheter for postoperative analgesia prior to laparotomy for small-bowel obstruction secondary to metastatic ovarian cancer. After insertion of the epidural catheter, Mastisol was applied to the patient's skin. Tegaderm™ Film (3M Health Care, Neuss, Germany), a transparent film dressing, was used to cover the epidural site and was secured by Medipore™ H Tape (3M), as is our usual practice to minimize catheter dislodgement. On postoperative day (POD) 1, the patient complained of itching at the epidural site. Her itching persisted and was refractory to diphenhydramine treatment. On POD 3, when the epidural catheter was removed, clinical examination of the patient's skin around the epidural site revealed erythema, edema, and vesicular eruption (Figure). A consultation was obtained with the Dermatology department, and contact dermatitis due to Mastisol was diagnosed based on history, appearance, and pattern. The site was cleaned and dressed with clobetasol propionate 0.05% ointment twice daily, and the lesions healed uneventfully. A viral culture of the vesicles was taken and found to be negative for herpes simplex virus. Plans were made for postoperative patch testing by the Dermatology department to confirm the diagnosis of Mastisol allergy. Unfortunately,



**Figure** The patient's skin around the epidural site, revealing erythema, edema, and vesicular eruption

the patient died shortly afterwards prior to completing the testing.

Mastisol is widely used as an adhesive, and skin reactions are extremely rare<sup>3</sup>; however, anesthesiologists need to be aware of the risks associated with Mastisol. A prompt treatment plan in conjunction with a consultation with a dermatologist can be expected to result in rapid resolution.

**Competing interests** None declared.

### References

1. Williams BA, Bolland MA, Orebaugh SA, Bottegal MT, Kentor ML. Skin reactions at the femoral perineural catheter insertion site: retrospective summary of a randomized clinical trial. *Anesth Analg* 2007; 104: 1309-10.

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2. *Liu SS, Allen HW, Olsson GL.* Patient controlled epidural analgesia with bupivacaine and fentanyl on hospital wards: prospective experience with 1,030 surgical patients. *Anesthesiology* 1998; 88: 688-95.
3. *Kline A.* Allergic contact dermatitis of the foot after use of Mastisol® skin adhesive: a case report. *The Foot & Ankle Journal* 2008; 1: 2.