

# Allergic Contact Dermatitis to Mastisol Adhesive Used for Labor Epidural Dressing: A Case Report

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## Introduction

Skin adhesives such as Mastisol are commonly used in obstetric anesthesiology to aid in the fixation of epidural catheters and prevent catheter dislodgment. Mastisol has been reported to have very rare incidences of allergic skin reactions compared to other commercial adhesives<sup>1,2</sup>. We report a case of severe allergic contact dermatitis (ACD) to Mastisol used during placement of a routine labor epidural.

## Case Report

Our patient is a 30yo G2P0 who presented at 38w4d gestation with SROM. Her medical history was notable for anxiety, gestational hypertension, and specifically, no reported allergies. She had a routine epidural placed by an experienced anesthesiologist. Mastisol adhesive and large Tegaderm transparent dressing were used. Patient ultimately had an uncomplicated primary Cesarean section for arrest of dilation.

**POD #1:** Patient noticed persistent itching of her back. She had been wearing an abdominal binder and the skin was not checked.

## Case Report (cont.)

**POD #2:** Patient was found to have a large geometric, erythematous rash with seeping clear thick fluid and blistering on her back with extension to her sacrum, bilateral buttocks, and sides of her abdomen.

- Started on PO diphenhydramine, IV methylprednisolone, and topical ointment

**POD #4:** ID consulted and IV vancomycin started for possible diagnosis of superimposed cellulitis

**POD #6:** Transitioned to PO cefdinir

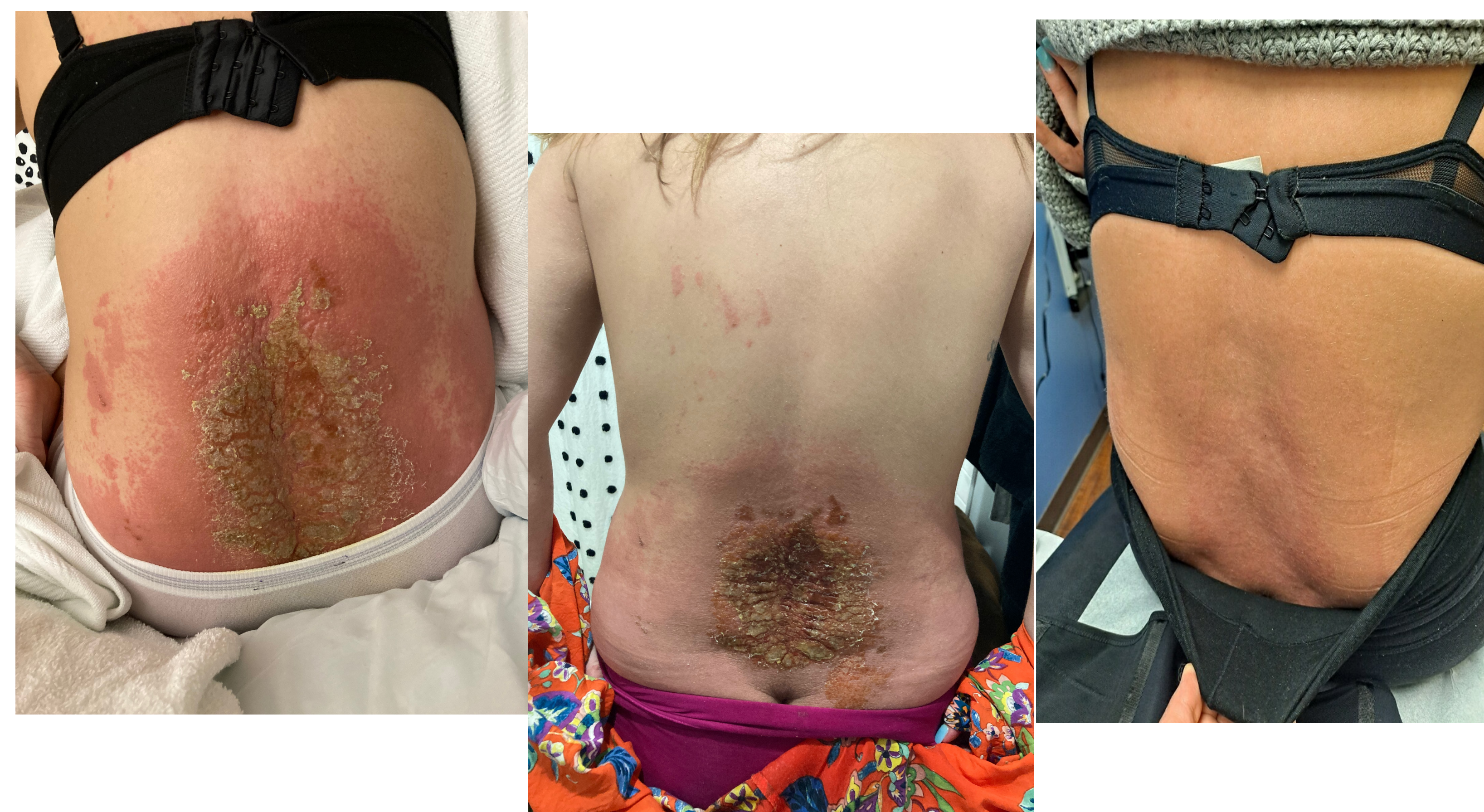


Fig. 1. Developing rash on patient's back on POD #3, POD #7, and postpartum follow-up at 3 weeks.

## Discussion

Mastisol is a liquid adhesive consisting of ethanol, acetone, methyl salicylate, gum mastic, styrax, and water<sup>2</sup>. Although rare, there have been case reports of Mastisol-related ACD.

- ACD is a Type IV (delayed) hypersensitivity reaction with erythema, edema, dermatitis, and blistering of the affected area<sup>3</sup>
- Diagnosis is supported by timing, geographic configuration of skin changes, pruritis, and lack of tenderness
- Treatment is largely supportive with diligent wound care, topical and/or oral steroids, and oral antihistamines<sup>3</sup>

## Take Home Points

Severe ACD to Mastisol can occur. Early treatment and close monitoring for secondary infections are crucial.

## References

1. Bowman, R. M., Thirunavu, V., & Lam, S. Blistering skin reaction with Mastisol in a patient with spina bifida: illustrative case. JNSCL 1(13), CASE2011.
2. Thornton NJ, Gibson BR, Ferry AM. Contact Dermatitis and Medical Adhesives: A Review. Cureus. 2021 Mar 24;13(3):e14090.
3. Ezech, Ugonna E. DO; Price, Harper N. MD; Belthur, Mohan V. MD Allergic Contact Dermatitis to Mastisol Adhesive Used for Skin Closure in Orthopedic Surgery: A Case Report. JAAOS 2018; 2(9): e037.