



LTE: “comment on [incidence of allergic reactions to crotalidae polyvalent immune fab]”

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To the Editor,

We read the recent article “Incidence of allergic reactions to Crotalidae polyvalent immune Fab” by Khobrani et al. [1] with great interest. Hopefully this paper, along with Kleinschmidt’s study [2], will dispel a persistent myth that, regarding snakebites and antivenom, “the cure is worse than the disease”.

Of course, every medication has the potential to harm. Here, we describe a life-threatening reaction to CroFab[®] in a woman with no previous sensitization and whose only known allergy was to guaifenesin.

A 75-year-old woman with coronary artery disease and atrial fibrillation, on edoxaban, was bitten on the finger by a copperhead (*Agkistrodon contortrix*) while gardening. Upon arrival to the hospital she had rapidly progressive swelling of the finger and hand. A hemorrhagic bleb was forming at the envenomation site. Vital signs were within normal limits. Because of the local effects and the patient’s anticoagulated state, we treated with six vials of CroFab[®] diluted in 250 mL of sterile water at 50 mL/hour. Five minutes into the infusion, she became dyspneic and developed wheezes. Her oxygen saturation fell to 91%. Her heart rate increased to 180 bpm and blood pressure decreased to 80/50 mm Hg. Antivenom was discontinued and the patient was given supplemental oxygen, nebulized albuterol, and ipratropium. A 1 L normal saline bolus was administered. She also received intravenous methylprednisolone, diphenhydramine, and famotidine. Two 0.5 mg epinephrine doses were given intramuscularly 10 minutes apart.

There was brief decreased responsiveness. A nasopharyngeal airway was inserted and secretions were suctioned from the mouth. The patient became more responsive and her blood pressure improved, and emergent intubation was not required. The patient received two grams of magnesium sulfate for persistent wheezing. Fiberoptic laryngoscopy revealed no significant angioedema.

Within 60 minutes from the onset of symptoms, the patient was awake, alert, and denied dyspnea. Her vital signs normalized without any additional interventions. It was later determined that the patient had a previously-unrecognized latex allergy.

On the first page of the CroFab[®] package insert, allergies to papain, chymopapain, other papaya extracts, and the pineapple enzyme bromelain are prominently listed in the “Warnings and Precautions” section [3]. CroFab does not contain latex, although in a later section of the insert it is mentioned that some latex allergens share antigenic structures with papain.

There are no absolute contraindications to antivenom. If the benefits outweigh the risks, it should be administered. A previous study of copperhead bites suggests that rapid treatment may lead to faster recovery, so our practice is to start

antivenom early [4]. We give antivenom whenever there is evidence of systemic toxicity and/or progressive local findings, as is recommended in a commonly cited algorithm [5].

There is a very low incidence of adverse reactions with CroFab[®], and we encourage physicians to treat envenomations aggressively to minimize tissue damage and systemic toxicity. However, clinicians should be aware of the allergies that may predispose patients to a reaction and consider pre-treatment with antihistamines, corticosteroids, and/or epinephrine in high-risk patients.

Disclosure statement

No potential conflict of interest was reported by the authors.

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