Correspondence

We will try to publish authors' responses in the same edition with readers' comments. Time constraints might prevent this in some cases. The problem is compounded in a bimonthly journal where continuity of comment and redress are difficult to achieve. When the redress appears 2 months after the comment, 4 months will have passed since the original article was published. Therefore, we would suggest to our readers that their correspondence about published papers be submitted as soon as possible after the article appears.

Treatment of Black Widow Spider Envenomation

To the Editor: The treatment described for black widow spider envenomation in Blackman's clinical review[1] continues to perpetuate recommendations for which there is little scientific basis. The role of calcium, methocarbamol, and narcotic analgesics in the treatment of black widow spider envenomation has evolved largely from anecdotal experience. No controlled study has been performed to determine optimal treatment. While a dramatic response to calcium is seen in some patients, failure to respond is common and should not exclude the diagnosis. In one of the few prospective studies on the subject, Key[2] found calcium effective in only 6 of 13 patients. One of 6 patients with the most serious signs of envenomation responded to calcium administration. Two retrospective studies cited in the review[3,4] found inconsistent responses to calcium, muscle relaxants, and narcotic analgesics as well.

Specific antivenin has been consistently shown to provide rapid and lasting relief of symptoms. Unlike antivenin used in snake bite envenomation, most patients respond dramatically to a single 2.5-mL vial. Antivenin is used much more liberally in other parts of the world, and early use of antivenin has been shown to reduce considerably the length of hospitalization and to prevent the development of lingering neurologic dysfunction observed in some patients not treated with antivenin.[5,6] The risk of immediate hypersensitivity reaction to antivenin derived from horse serum can be reduced by sensitivity testing prior to administration. A serum sickness reaction can occur, but is usually mild given the small volume necessary.

The routine use of calcium, muscle relaxants, and narcotic analgesics, while reserving specific antivenin for only the most serious envenomations, subjects patients to unnecessary suffering and in some instances prolonged morbidity.

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References

1. Blackman JR. Spider bites. J Am Board Fam Pract 1995; 8: 288-94.
2. Key GF. A comparison of calcium gluconate and methocarbamol (Robaxin) in the treatment of latrodectism (black widow spider envenomation). Am J Trop Med Hyg 1981; 30:273-7.
3. Moss HS, Binder LS. A retrospective review of black widow spider envenomation. Ann Emerg Med 1987;16(2): 188-92.
4. Timms PK, Gibbons RB. Latrodectism: effects of the black widow spider bite. West J Med 1986; 144:315-7.
5. Mareti'c Z. Latrodectism: variations in clinical manifestations provoked by *Latrodectus* species of spiders. Toxicon 1983; 21:457-66.
6. Sutherland SK, Trinca JC. Survey of 2144 cases of redblack spider bites: Australia and New Zealand 1963-1976. Med J Aust 1978; 2:620-3.

The above letter was referred to the author of the article in question, who offers the following reply:

To the Editor: I agree with Dr. Miller's comments that we underutilize antivenin in the management of black widow spider envenomation. It has also been my experience that one or at most two vials is more than enough to manage the symptoms and might in fact prevent hospitalization. That we use calcium gluconate, intravenous methocarbamol, and a meperidine-diazepam combination indicates the somewhat general dissatisfaction with any one of those three methods of managing symptoms. We have had good experience with all three and make the decision based on severity of symptoms. In relatively minor envenomations, we have found antivenin therapy unnecessary. Individuals with severe symptomatology or autonomic abnormalities or children and pregnant women are all excellent candidates for antivenin.

One problem with antivenin administration is the lack of an available product in many of our rural hospitals. The antivenin is expensive and has an expiration date; therefore, some hospitals do not purchase it. Consequently, it is necessary to provide treatment alternatives.

Thank you for your remarks regarding this interesting management problem.

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To the Editor: I enjoyed reading Dr. Blackman's informative article concerning spider bites (J Am Board Fam Pract 1995; 8:288-94) but feel compelled to comment on what could be a misleading drawing of a black

widow spider. In Figure 3, the sketch of a black widow spider clearly shows small bristles on the legs. The bristles on the legs of the black widow spider, however, are so fine and sparse as not to be apparent without some magnification. This distinction has some clinical importance, because no other black spider has smooth legs. If one observes a black spider with smooth, shiny legs and a bulbous abdomen, the identification of a black widow is certain, and it is not necessary to risk inverting the spider to observe the characteristic hourglass-shaped marking on the ventral abdomen.

In a suspected black widow spider envenomation, the attending physician can be confident of the identity of the offending spider in those instances where the spider has been mutilated, if even a single shiny black leg can be recovered from the remains of the spider. Likewise, if bristles are clearly apparent on the leg of the crumpled arachnid, the patient can be reassured that he is not the victim of a black widow spider bite.

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