Use of Antivenom in *Vipera berus* Bites—A Comment

To the Editor:

In their recent letter, Moser and Roeggla report severe envenoming by *Vipera berus* in a 12-year-old boy.¹ Shock, upper airway narrowing, and abdominal pain developed within 10 minutes of the bite. These are familiar early anaphylactic features of envenoming by *V. berus*, possibly attributable to venom autacoids.^{2,3} After an initial response to symptomatic treatment, hemorrhagic swelling spread rapidly to involve the bitten extremity and adjacent hemithorax and he suffered other complications. Such severe systemic and local envenoming fulfils all published criteria for antivenom treatment and yet none was given for fear of an antivenom reaction. However, the only reference cited by the authors to support their nihilistic decision is a study of rattlesnake bites in children in the United States at a time when the notoriously reactogenic Wyeth antivenom was in use (1988–1998). Wyeth was subsequently replaced by the much safer CroFab (Protherics Inc, Nashville, TN).⁴ The risk of such reactions with currently available antivenoms for use in bites by European vipers is very low,^{2,3,5} whereas the risk of death from *Vipera* bites in Europe is a compelling reason to use antivenom in the treatment of severe envenoming, especially in children. We are anxious to correct the authors' misunderstanding about the validity of the "Stockholm criteria"⁶ for antivenom treatment in children. This is supported in the literature, including references quoted by Moser and Roeggla and below.⁵ In fact, the agreed indications should be applied even more liberally in children and pregnant women because of the risk of more severe consequences of envenoming.⁶ A most important effect of antivenom is that it will prevent or ameliorate the widespread and disabling local swelling.⁷ Although initial, dramatic systemic symptoms, often reminiscent of anaphylaxis, can sometimes be managed symptomatically, antivenom treatment shortens the period of circulatory instability, reducing the need for intravenous fluids and hence the risk of volume overload. This is particularly important in small children as pulmonary edema may develop late in the course when large volumes of extravasated fluid in the extremities and trunk are being reabsorbed.

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In Reply to "Use of Antivenom in *Vipera berus* Bites—A Comment"

To the Editor:

We would like to thank Drs Persson, Stiber, and Warrell for their helpful comments on our case report of severe envenoming by *Vipera berus* in a 12-year-old child.¹ We agree that the situation at the time of admission fulfilled the reported criteria for antivenom treatment. The boy was not treated with antivenom therapy because nearly all symptoms of envenoming apart from rapidly spreading swelling improved rather quickly under supportive therapy and the risk of antivenom therapy was considered to be higher than the potential benefit.

The question of when to administer antivenom may be clearly answered within the community of snake bite specialists. In clinical medicine, however, some controversy and confusion still remain. Professor Warrell acknowledges that specific antidotes are underused in the United Kingdom.² This may be true in continental Europe as well, and we would favor the publication of guidelines addressed specially to the therapy of children in a general medical journal as an amendment to his clinical review in the *British Medical Journal* published in 2005.