### CORRESPONDENCE

proportion of children deteriorating to more severe clinical grades of envenomation [3], lesser doses of prazosin requirement and fewer days of hospital stay. Scorpion antivenom was beneficial even when given upto 8 hours after the sting possibly due to redistribution of venom from the tissues to the plasma. Scorpion antivenom usage also led to decreased incidence of myocardial dysfunction. No serious adverse effects of scorpion antivenom were encountered.

While the case control study by Pandurang, *et al.* [1] too demonstrated beneficial effects as well as safety of scorpion antivenom, we have some concerns regarding the study. The incidence of various autonomic symptoms and their resolution time is not stated. We also do not find mention of other clinical parameters such as the proportion of children deteriorating to more severe clinical symptoms such as myocarditis or pulmonary edema, and mean doses of prazosin requirement in both the groups. These parameters are important in order to assess the efficacy of scorpion antivenom. Data regarding electrocardiogram and echocardiography, which are essential tools for the optimum management of children with scorpion sting envenomation developing myocardial dysfunction, have not been presented.

A high mortality (11.2%) in the subjects enrolled by Pandurang, *et al.* [1] is also a concern. Prazosin alone has been known to reduce the mortality to less than 1 % [4]. A lesser dose (only one vial injected over 5-7 minutes) of anti-scorpion venom and high incidence of pulmonary edema could have contributed to the high mortality. We also wish to point out that test doses of scorpion antivenom may not be essential for this condition as anaphylaxis is rare due to the high levels of adrenaline associated with scorpion sting envenomation [2-5].

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## **AUTHOR'S REPLY**

Instead of individual autonomic symptoms, we monitored all patients using clinical composite score which includes autonomic symptoms [1]. We have reported mean duration of vasopressor requirement instead of mean dose of prazocin. We used antivenom in a dose in accordance with study by Natu, *et al.* [1]. Clinical recovery was assessed in our study, based on a set of uniform parameters like heart rate, respiratory rate and blood pressure for age and sex of the patients, and presence of normal neurological status. ECG was used for management but data regarding its use were not reported in our study. Echocardiography was not used due to lack of resources.

The high incidence of pulmonary edema in our series was due to late reporting of patients, and this might be the reason for high mortality rate in our study [2]. Previous studies also reported that in cases with late hospital admission, the beneficial effect of antivenom and/or prazosin is limited [2]. Non-availability of ventilators in our institute during study period may be another contributory factor in this regard.

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