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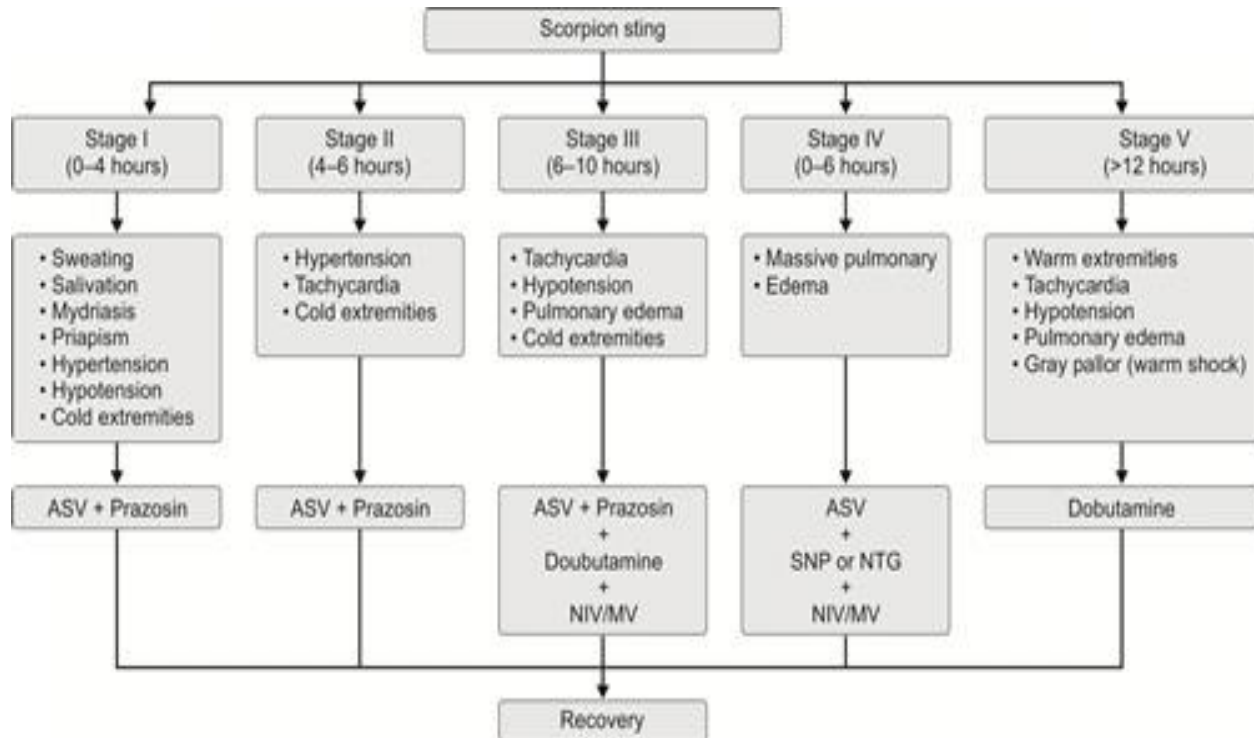
## Recent Advances in Management of Scorpion Sting – An Updated Synopsis

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Mortality and morbidity due to scorpion bite are common all over the world, especially in tropical countries like those in Indian subcontinent. Predominantly affected population is children. A **scorpion sting** is an injury caused by the stinger of a scorpion resulting in the medical condition known as **scorpionism**, which may vary in severity. Scorpion stings usually result in pain, paresthesia, and variable swelling. In serious cases, scorpion stings may involve the envenomation of humans by toxic scorpions, which may result in extreme pain and serious illness.



**Table 1 Clinical score of scorpion envenoming and corresponding treatment**

The treatment is directed at using the alpha blockers (i.e. Prazosin, considered scorpion venom antidote).

## Management:

Mainstay of treatment is on following lines:

- **Stage 1. (0-4 hrs) Prazosin + antiscorpion venom**
- **Stage 2. (0-6 hrs) Prazosin + antiscorpion venom (ASV)**
- **Stage3. (6 – 10 hrs). Prazosin + antiscorpion venom (ASV) + dobutamine + NIV**
- **Stage 4. (0-6 hrs) ASV+ Sodium nitroprusside (SNP)**
- **Stage 5. (>12 hrs) Add Dobutamine (in addition to above)**
- **Recovery**

## Conclusion

Whatever the treatment, ie, antivenom or intensive care, it has been shown that mortality decreases wherever the management of scorpion stings has been anticipated and organized by health authorities. However, the choice between the two options requires realistic consideration of all relevant parameters, including logistics. In addition, mortality should not be the only endpoint; one should also consider the simplicity of management and rapidity of recovery. The complexity of contradictory clinical symptoms causes difficulty to choose symptomatic treatments, especially given that progression of symptoms and onset of complications may be rapid. While some drugs can be routinely used with a relevant and accurate protocol, many others remain the prerogative of the specialist. In contrast, treatment with antivenom, designed to eliminate venom from the organism rapidly, is likely to be the most logical and now easier to manage with low risks. Fragments of purified IgG are very effective and safe, even when administered by nonmedical personnel, provided that they have been trained. Administered early, they can prevent serious complications and reduce transfers to referral hospitals, but this strategy requires ready access to antivenom in remote health facilities.

In many cases, the combination of immunotherapy and symptomatic treatment remains a necessity. These treatment strategies potentiate each other, and give a satisfactory response to most common situations encountered in tropical countries. The training of health personnel regarding these combined treatment protocols should be extended to all countries where the incidence of scorpion stings is high. Public information on these new therapeutic strategies is essential in order to promote early presentation to health centers.

## Further Reading

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