

Oral Abstracts

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SNAKEBITE AND ANTIVENOM DEVELOPMENT

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Abstract: Snake envenomation is a neglected tropical disease. The number of snake envenoming in the region is estimated to be very high and is reported to account for 60% of global snake bite burden and more importantly the region accounts for up to 77% of global snake bite related deaths. A recent survey in Sri Lanka estimated that the crude overall incidence of snake bite is around 400/100,000 per year. The morbidity associated with snake envenoming has not even been properly estimated and includes pain, amputations, psychological effects and loss of earning.

The standard of care is administration of species specific antivenom. At present antivenom administration is many hours delayed as the indications of antivenom administration is based on development of complications such as coagulopathy. There are no surrogate markers of envenoming that will guide the physician early administration of antivenom.

The region lacks species specific antivenom. Many countries use a polyvalent antivenom manufactured in India using venom of snakes of India. Further, the safety of available antivenom in the region has been questioned due to high incidence of adverse reactions including anaphylaxis. Another major issue is that some of the venomous snake bites e.g. *Hypnale* spp are treated with supportive care only as there is no antivenom available at all.

The need of the region is to develop species specific antivenom using venom of medically important snakes of each country. Further, improved technology should be used to ensure safety of such antivenom. International research collaborations with new technologies is the way forward. Sri Lanka has recently been able to produce a species specific effective antivenom in collaboration with Instituto Clodomiro Picado of Costa Rica and Animal Venom Research International of USA.

Learning Objectives:

1. Identify that snake envenoming is a neglected tropical disease
2. List issues of management of snake bite