

THE SAW-SCALED VIPER and its BITES

S. Sivansuthan and N. Suganthan

Echis carinatus Schneider, 1801 (Viperidae)

Saw-scaled viper (E), vali polonga (S), suruttai pambu (T)

The saw-scaled viper was first illustrated by Patrick Russel in 1796. It is venomous and is responsible for most venomous bites in the Jaffna Peninsula. The snake is distributed in the dry and sandy arid coastal plains of Sri Lanka. It is found near the sea in a number of Provinces—Kalpitiya and Wilpattu National Park in the North-western, Mannar, Jaffna and Mullaitivu in the Northern and in the Eastern Province, extending to the south of the Ruhunu National Park (Yala) in the Southern Province, where it prefers a habitat of sparse vegetation.



The Sinhala name “vali polonga” means sand snake and refers to its habitat preference while the Tamil name “suruttai pambu” means coil snake and describes its striking position. It is an aggressive, irritable, nocturnal snake with a body length ranging from 25 to 35 cm.

It bites fingers or the feet or toes of victims, commonly producing local swelling and occasionally blistering and necrosis. The commonest systemic manifestation is coagulopathy (or incoagulable blood detected by the 20WBCT). A small percentage of patients develop spontaneous bleeding manifested by bleeding from the gums, haematemesis, haemoptysis or haematuria. Acute kidney injury is reported rarely. There are no neurological manifestations.

Indian polyvalent antivenom therapy is effective in correcting coagulopathy with the first dose (10 vials), but in some cases repeated doses will be needed. There have been no reported deaths in Sri Lanka.

Sivapalan Sivansuthan MBBS, MD, FCCP, FRCP
Consultant Physician,
Teaching Hospital Jaffna

Visiting Lecturer in Pharmacology,
Faculty of Medicine,
University of Jaffna

N. Suganthan MBBS (Jaffna), MD (Colombo),
MRCP (UK), MRCP (Ireland), MRCPS (Glasg),
MRCP (London), M Sc (Medical Toxicology) (Col)

Senior lecturer and Specialist in General
Medicine,
Faculty of Medicine,
University of Jaffna

Bibliography

Gnanathasan CA, Rodrigo C, Peranantharajah S, Coonghe A, Pieris P (2008). A case series of envenoming by saw-scaled viper (*Echis carinatus*) in Sri Lanka [abstract]. Proceedings of Global issues in clinical toxinology, November 2008 conference Melbourne, Australia.

Kularatne SAM, S Sivansuthan, SC Medagedara, K Maduwage, A. de Silva (2011). Revisiting saw-scaled viper (*Echis carinatus*) bites in the Jaffna Peninsula of Sri Lanka: distribution, epidemiology and clinical manifestations. *Trans Royal Soc Trop Med and Hyg* 105 (2011) 591– 597.

Gnanathasan Ariarane, C Rodrigo, T Peranantharajah, A Coonghe (2012). Case Report: Saw-Scaled Viper Bites in Sri Lanka: Is It a Different Subspecies? Clinical Evidence from an Authenticated Case Series. *Am. J. Trop. Med. Hyg.*, 86(2), 2012, pp. 254–257.