

REPORT ON **Guest Lecture Series** by **Dr. Sakthivel Vaiyapuri**

Organized by

**Institutional Research Board,
Department of Medicine, Cardiology,
Pharmacology and Medical Education Unit
Trichy SRM Medical College Hospital and
Research Centre, Tiruchirapalli**

24.07.2018



Guest Lecture Series 2: Novel Strategies for the diagnosis and treatment of snake bites

Report on Guest Lecture on “Novel Strategies for the diagnosis and treatment of snake bites”

Background

Snakebites represent a major neglected tropical disease affecting several million people worldwide and resulting in as many as 150000 deaths each year. Even more victims suffer limb-deforming injuries or require amputation. Our recent study [PLoS One (2013); Citations: New York Times & Times of India] on the socio-economic impact of snakebite on the rural population of Tamil Nadu, India showed the magnitude of this disaster on a typical population, which directly affected by snakebites. The state-of-the-art technology used for the production of antivenom (produced in animals against snake venoms) has remained virtually unchanged for more than 100 years. This treatment is associated with several problems; a) most notably it requires refrigeration, b) it is very expensive, c) must be administered in a hospital under supervision and d) lack of efficacy with high rates of serious complications. Therefore, it is vital to identify and understand the molecular functions of venom components that are responsible for death and injury in order to develop more efficacious therapeutics to treat snakebites.

Snake bites are life-threatening injuries that can require intensive care. The diagnosis and treatment of venomous snake bites is sometimes difficult for clinicians because sufficient information has not been provided in clinical practice. Here we review the literature to present the proper management of bites by mamushi, habu, and yamakagashi snakes, which widely inhabit Japan and other Asian countries. No definite diagnostic markers or kits are available for clinical practice; therefore, definitive diagnosis of snake-venom poisoning requires positive identification of the snake and observation of the clinical manifestations of envenomation. In some cases, cause swelling and pain that spreads gradually from the bite site. Severe cases manifest not only local signs but also general symptoms such as vomiting, cyanosis, loss of consciousness, and hypotension.

This Guest lecture aims at summarizing and discussing the epidemiology, clinical features, diagnosis and treatment of snake bite envenoming any part of the world. This programme is organized by the Institutional Research Board and Department of Medicine, Cardiology and Pharmacology, Trichy SRM Medical College Hospital and Research Centre, Tiruchirapalli for taking initiative to address this serious issue of neglected tropical disease.

VENUE & TIME

The programme was held at Dr. B.C. Roy Hall, Second Floor, Hospital Block, from 1.30 to 3.30pm on 24.07.2018.



From Left to Right: Dr. P. Thirumalaikolundusubramanian, Vice Principal; Dr. S. Revwathy, Medical Superintendent; Dr. Sakthivel Vaiyapuri, Guest Speaker; Dr. S. Vinayagam, Director (Health Sciences); Dr. A. Jesudoss, Dean and Dr. P. Anusuya, Deputy Director-IQAC



Dr. R. Raveendran, Consultant Cardiologist welcomed the gathering



Dr. N. Balasubramanian, DD Felicitated



**Dr. P. Revwathy, Med. Supdt.
Felicitated**



**Dr. P. Anusuya, DD (IQAC)
Felicitated**



**Dr. A. Jesudoss, Dean delivered
Presidential Address**



**Dr. S. Vinayagam, Director (HS)
Inaugural Address**



Honoring Guest by the Dean

INAUGURAL FUNCTION

Dr. R. Raveendran, Consultant Cardiologist welcomed the gathering. The Director - Health Sciences, Dr. S. Vinayagam, inaugurated, Dr. A. Jesudoss, Dean presided, Dr. S. Revwathy, Medical Superintendent and Dr. P. Anusuya, Deputy Director-IQAC felicitated the programme.

STATUS OF PARTICIPANTS

A total of 170 participants included clinical, pre, para clinical teaching faculty, other college faculties, postgraduates and nursing staff participated.

TECHNICAL DELIBERATIONS

The guest Dr. Sakthivel Vaiyapuri was introduced by Dr. A. Sundhararajan, Research Faculty of our institution.



The deliberations by Dr. Sakthivel Vaiyapuri was highly interested and thought provoking. Snake bite is an important occupational injury affecting farmers, plantation workers, herders, and fishermen. Open-style habitation and the practice of sleeping on the floor also expose people to bites from nocturnal snakes. Several epidemiological studies have outlined characteristics of snake bite victims in the region. Bites are more frequent in young men, and generally occur on lower limbs. The incidence of snake bites is higher during the rainy season and during periods of intense agricultural activity. Snake bite incidence and mortality also increase sharply during extreme weather events such as floods. The highest clinical symptoms including respiratory diseases are found important snake bite can be in this region compared to other health problems

The identification of snake species is crucial for optimal clinical management, because it allows clinicians to choose the appropriate treatment, anticipate complications, and therefore to improve prognosis. Moreover, as specific antivenoms are not available for South Asian pit vipers and most krait species, identifying these species would help to avoid wasting this expensive treatment and exposing patients to antivenom-induced adverse reactions. Health workers in rural districts are usually poorly trained to manage snake bite envenoming, which is a complex emergency. He described the recent survey conducted in India and Pakistan showed that many doctors were unable to recognize systemic signs of envenoming. Another study in northwest India revealed that most snake bite victims presenting at primary health centres received inadequate doses of antivenom and that out of 42 patients who required assisted ventilation, only one was intubated. Improving the knowledge of care-givers at all levels of the health system is a challenge of paramount importance and great urgency in various places.

The technical session was followed by an open discussion in which the speakers thereby the doubts raised by the participants were clarified.





Honoring Dr. Sakthivel Vaiyapuri with Visiting Professorship plaque

Vote of Thanks

Dr. N. Prabhsuaran, Research Faculty proposed a vote of thanks.



The programme ended with National Anthem at 3.45pm.