

Some concerns on ‘clinico-epidemiological profile and outcome of snakebite patients presented to a teaching institute – A descriptive retrospective review’

Dear Editor,

We read the article authored by Kumar *et al.*,^[1] recently published in your esteemed journal, with great interest. We would like to highlight some concerns and suggestions.

In this retrospective, observational, descriptive study, the authors have tried to highlight the clinico-epidemiological pattern and the outcome following the snake bite in the southern part of India. Calculating the envenomation severity without a validated score such as snake bite severity score (SSS) is inaccurate and is a major concern here.^[2,3] The SSS uses other parameters like respiratory, hematological, neurological, renal, and gastro-intestinal symptoms to grade the severity of envenomation accurately.^[2,3] In this study, only local signs without any information on other systems have been used, whereas a comparative description of local and systemic symptoms of envenomation and complications could have given a better picture of the clinical manifestations of envenomation [especially for a bite by elapid (cobra and krait) and Viperidae family (Russel's viper, saw-scaled viper)].^[3,4]

As most of the bites were neurotoxic, detailed information on the percentage of patients who required an intensive care unit (ICU) and mechanical ventilation and an objective measurement of the severity of neuromuscular paralysis using head lift and/or single breath count would have better represented the outcome parameters.^[1,3,4] Similarly, in the case of viper bite, the information on the percentage of patients who developed acute renal failure and required dialysis is missing.^[1] In local manifestations, compartment syndrome, which is an important complication of cobra and viper bite, is not mentioned. Krait bite is most common as per the study data,^[1] but krait bite occurs mainly in India from July to October so that a seasonal distribution could have added better representation.^[5] In addition, kraits have small fangs and are not known to develop obvious

local signs or symptoms. Therefore, it would be prudent to utilize SSS to capture neuromuscular paralysis and autonomic neuropathy.

In 41 cases, species could not be identified.^[1] However, the readers would be interested to know how many of them had abnormal 20-minute whole blood clotting test (WBCT), PT, aPTT, INR, and Hb (hemolysis), which could reflect the hemotoxic manifestations of envenomation.^[4,5] In the case of patients referred from other remote areas, data on first aid measures undertaken before reaching the study hospital and the number of hospitals visited before reaching the ED, mode of transport, and reason for the delay in reaching are important epidemiological factors to explore as they reflect the need for awareness and community empowerment to reduce the burden of mortality and morbidity following snake bite.^[5] Similarly, information on the number of ASVs received before presenting to the study center and the time for snake bite to the administration of ASV (needle time) could have added more authenticity to the manuscript as it can affect the final clinical outcome.^[3-5]

To conclude, we hope that the points mentioned earlier will be informative for the readers.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

**Chitta R. Mohanty¹, Amiya K. Barik²,
Rakesh V. Radhakrishnan³,
Stephen P. Samuel⁴**

¹Department of Trauma and Emergency, All India Institute of Medical Sciences, Bhubaneswar, Odisha, India, ²Department of Anaesthesia and Intensive Care, Post Graduate Institute of Medical Education and Research, Chandigarh, India, ³College of Nursing, All India Institute of Medical Sciences, Bhubaneswar, Odisha, India, ⁴Sr. Consultant and Sr. VP, India Clinical Research and Medical Affairs, Ophirex, Inc, USA

Address for correspondence: Dr. Chitta R. Mohanty, Department of Trauma and Emergency, All India Institute of Medical Science, Bhubaneswar -751 019, Odisha, India.
E-mail: drchitta8@gmail.com

References

1. Kumar SM, Shreekrishna HK, Singi Y. Clinico-epidemiological profile and outcome of snakebite patients presented to a teaching institute – A descriptive retrospective review.

J Family Med Prim Care 2024;13:151-6.

2. Dart RC, Hurlbut KM, Garcia R, Boren J. Validation of a severity score for the assessment of crotalid snakebite. *Ann Emerg Med* 1996;27:321-6.
3. Carter RW, Gerardo CJ, Samuel SP, Kumar S, Kotehal SD, Mukherjee PP, *et al.* The BRAVO clinical study protocol: Oral varespladib for inhibition of secretory phospholipase A2 in the treatment of snakebite envenoming. *Toxins (Basel)* 2022;15:22. doi: 10.3390/toxins15010022.
4. Warrell DA. Guidelines for the Management of Snake Bites in the South-East Asia Region. World Health Organization; 2010. p. 1-162.
5. Mitra S, Agarwal A, Shubhankar BU, Masih S, Krothapalli V, Lee BM, *et al.* Clinico-epidemiological profile of snake bites over 6-year period from a rural secondary care centre of Northern India: A descriptive study. *Toxicol Int* 2015;22:77-82.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Received: 14-02-2024

Revised: 06-03-2024

Accepted: 07-03-2024

Published: 26-07-2024

Access this article online	
Quick Response Code: 	Website: http://journals.lww.com/JFMPC
	DOI: 10.4103/jfmpe.jfmpe_234_24

How to cite this article: Mohanty CR, Barik AK, Radhakrishnan RV, Samuel SP. Some concerns on 'clinico-epidemiological profile and outcome of snakebite patients presented to a teaching institute – A descriptive retrospective review'. *J Family Med Prim Care* 2024;13:3445-6.

© 2024 Journal of Family Medicine and Primary Care | Published by Wolters Kluwer - Medknow