Early severity predictors of snakebite envenomation in the southern region of Tunisia

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I read with interest the paper by Chakroun-Walha *et al.*[1]; it is a retrospective review of the medical records of patients with a history consistent with snakebite in a region of Tunisia. It found that leucocytosis within the first 24 h of emergency department arrival and prior tourniquet application were the independent predictors of severe snakebite envenoming. Although it is a baseline study, I am delighted that authors are at the forefront in showcasing snakebite envenoming, a neglected tropical disease, in North Africa. However, I have few observations:

First, I doubt the utility of leucocytosis in predicting severe envenoming in snakebite victims presenting at rural health centres of low and middle-income countries (who first receive most snakebite cases). This is because the resources for obtaining a complete blood count may be lacking. However, bedside 20 min whole blood clot test has been recommended to diagnose coagulopathy in this setting[2]; it does not require expensive equipment and training and ensures timely administration of anti-snake venom if indicated.

Second, in contrast, the use of inappropriate and harmful traditional methods like applying a tourniquet above the bite site remains an important predictor of undesirable outcomes. For instance, a prospective cohort study of patients admitted for snakebite in a rural health centre in northern Nigeria showed that the application of a tourniquet before admission was associated with higher anti-snake venom requirement, increased median cost of hospitalization, and longer hospital stays[3].

Therefore, the current study's finding suggests that countries and global partners may need to continue investments in the World Health Organisation road map to prevent and control snakebite envenoming, which seeks to half snakebite mortality by 2030[4-6]. In addition, community engagement and empowerment efforts that involve community education against ineffective and harmful first aid methods for snakebites should be enhanced.

Conflict of interest statement

The author reports no conflict of interest.

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