CORRESPONDENCE



Monitor Lizard Envenomation Treated with ASV

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To the Editor: A 12-y-old child was brought to the emergency department after being bitten by some reptile with severe pain at the site of the bite, vomiting, bleeding gums, and hematuria. Examination showed active bleeding from the gums, and laboratory tests showed thrombocytopenia, prolonged prothrombin time, elevated D-dimer levels, and a prolonged 20-min whole blood clotting time (WBCT). Initially, the possibility of a snake bite was considered, and the child was given a trial of anti-snake venom (ASV), with 10 vials administered at the outset. However, after six hours, WBCT was still prolonged and bleeding manifestations persisted, so additional 10 vials of ASV were given. It was later discovered that the reptile responsible for the bite was a monitor lizard. After a total of 20 vials of ASV were administered, WBCT was repeated and found to be normal, with cessation of bleeding manifestations. The child's laboratory parameters normalized within 48 h, and child was observed for 96 h before he discharged.

Monitor lizards are reptiles that are mainly found in Asia, Africa, and Australia [1]. The Bengal monitor is the most common species of monitor lizard in India [2]. Although monitor lizards are commonly believed to be nonvenomous, recent cases have shown that they can produce hemotoxic venom which contains a number of cytotoxic substances like serotonin, protease, hyaluronidase, helodermin, and gilatoxin [3]. Some monitor lizards, like Komodo dragon, have genes or transcripts encoding toxins similar to those found in snake venoms [4].

In conclusion, lizard bites and envenomation are extremely rare in children. Though monitor lizard bite was considered non-venomous previously, recent experiences prove that it can present with life-threatening coagulopathy similar to that of a hemotoxic snake bite. Hence the use of ASV in monitor lizard bite can be a topic of research.

Declarations

Conflict of Interest None.

References

- Monitor lizard. Available at: http://en.wikipedia.org/wiki/monitor lizard. Accessed on 29th March 2023.
- Auffenberg W. The Bengal Monitor. Gainesville, USA: University Press of Florida; 1994. p. 103–18.
- Fry BG, Vidal N, Norman JA, et al. Early evolution of the venom system in lizards and snakes. Nature. 2006;439:584

 –8.
- Koludarov I, Jackson TN, Brouw BOD, et al. Enter the dragon: the dynamic and multifunctional evolution of anguimorpha lizard venoms. Toxins (Basel). 2017;9:242.

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