

Lizard Bite Masquerading as Scorpion Sting Envenomation

RAMESH NEELANAVAR¹, MALLANAGOUDA PATIL², SHANKARGOUDA PATIL³, BHAVANA LAKHKAR⁴, VIJAYKUMAR SHEGJI⁵

ABSTRACT

Lizard bite is very infrequent in children. Lizards tend to avoid confrontation. Bites are only inflicted when they are manipulated or when they are cornered and feel threatened. Lizard bites may be frightening but most do not cause serious health problems. The wall lizard or gecko, found in most homes, is not poisonous at all. It only checks insect population. A two-year-old boy was brought with history of lizard bite over right hand when he was trying to capture it. The child had experienced excessive sweating and irritability within two hours of bite. He was treated with supportive care. Prazosin hydrochloride was administered in the dose of 30µ/kg as his symptoms mimicked the autonomic storm which is typically seen with scorpion sting envenomation. To the best of our knowledge autonomic storm following lizard bite has not been reported in the Indian literature so far.

CASE REPORT

A two-year-old male child born out of non-consanguineous marriage with normal developmental milestones till age, brought with history of excessive sweating and irritability following lizard bite. There was history of lizard bite over right hand two hours prior to admission while he was trying to capture the lizard. There was also a history of lizard bite to the right arm of mother, when she was attempting to dislodge the lizard from the baby's hand.

Scorpion bite being a more common occurrence was ruled out while the parents were interviewed.

On examination, child was irritable with excessively perspiring with pulse rate of 160/min, Blood pressure of 140/112mm of Hg, respiratory rate of 50 breaths/min and temperature of 36.8°C, with dilated pupils in both eyes [Table/Fig-1]. There was a erythema and tenderness over the bitten site on the right hand of a child. Mother had erythema of 2x2cm around the bitten site. The child was treated with intravenous fluid, oxygen and sedation. As the clinical features of adrenergic storm, like tachycardia, hypertension, tachypnoea, perspiration, and dilated pupils were present, the patient was treated with the first dose of prazosin hydrochloride in the dose of 30µ/kg. The child responded well to the first dose over next four hours with subsidence of adrenergic storm. Subsequent doses were not given.

DISCUSSION

There are around 3000 species of lizard that exists in the world [1]. There are only two venomous species of lizards i.e. the Gila monster, *Heloderma suspectum* and Mexican beaded lizard [2]. Both of them are not found in India. Envenomation by venomous lizards is very rare [3].

| Parameter | At admission | After half an hour | 1 hour | 2 hour | 4 hour |
|----------------------------------|--------------|--------------------|---------|---------|-----------|
| Heart Rate (beats/minute) | 160 | 150 | 140 | 134 | 124 |
| Blood Pressure (mm Hg) | 140/112 | 138/100 | 134/80 | 124/78 | 110/76 |
| Respiratory Rate (cycles/minute) | 50 | 48 | 44 | 40 | 36 |
| Sweating | +++ | +++ | ++ | + | - |
| Pupils | dilated | dilated | dilated | dilated | constrict |
| Periphery | cold | cold | cold | cold | warm |

[Table/Fig-1]: The events of autonomic storm following lizard bite.

Keywords: Autonomic storm, Prazosin hydrochloride, Venomous

Lizard bites are very rare and usually occur following attempts to handle or capture them. In the olden days the breath or the urine of the lizard was considered poisonous [4] which is not true. Envenomation by poisonous variety results from contamination of the wound with neurotoxic venom [5]. It may cause tissue injury which manifest with local symptoms of severe pain, erythema, oedema. There can be systemic manifestations like nausea, vomiting, haemetemesis, dyspnoea, dysphoria and blurring of vision and generalized weakness. These manifestations may last for 72 to 96 hours. The treatment consists of infiltration of local anaesthetic to relieve pain, cooling of the bitten area, measures to prevent infection including tetanus toxoid [5]. Wound should be cleaned thoroughly and irrigated with antiseptic solution. There is no specific treatment other than reassurance to the person bitten by lizard in India [5].

Taksande AM et al., reported a lizard bite in Indian child presented with excessive crying, swelling and bleeding from the bitten site, who recovered without any complications [4]. Vikrant S and Verma BS reported acute kidney injury following monitor lizard bite [6]. Autonomic storm like features are usually seen with scorpion sting envenomation, but rare with lizard bite. Our patient with lizard bite presented mainly with autonomic storm, without much local symptoms over the bitten site and responded well to the first dose of prazosin hydrochloride.

CONCLUSION

Lizard bite can present with autonomic storm. Prazosin hydrochloride may be required to control the autonomic storm along with symptomatic and supportive treatment.

REFERENCES

- [1] Mahadevan S, Paul VK. Animal and insect bites. In: Meharban Singh. *Medical Emergencies in Children*. 5th ed. New Delhi: Sagar Publications; 2012: 745-63.
- [2] Norris RL, Oslund S, Auerbach PS. Disorder caused by reptile bites and marine animal envenomation. In: Fauci AS, Braunwald E, et al. *Harrisons Principles of Internal Medicine*. 14th ed. New York: McGraw Hill; 1998: 2544-48.
- [3] Cantrell FL. Envenomation by the mexican beaded lizard: A case report. *J Toxicol Clin Toxicol*. 2003;41(3):241-44.
- [4] Taksande AM, Murkey P, Kumar A, Vilhekar KY. Lizard Bite in Indian Child: Case Report. *J Indian Acad Forensic Med*. 2008;30:1.
- [5] Singh UK, Layland FC, Prasad R, Singh S. *Poisoning in Children*. 3rd ed. New Delhi: Jaypee Brothers; 2006: 57-83.
- [6] Vikrant S, Verma BS. Monitor lizard bite-induced acute kidney injury—a case report. *Renal failure*. 2014;36(3):444-46.

PARTICULARS OF CONTRIBUTORS:

1. Resident, Department of Paediatrics, BLDE University, Vijayapur, Karnataka, India.
2. Associate Professor, Department of Paediatrics, BLDE University, Vijayapur, Karnataka, India.
3. Professor, Department of Paediatrics, BLDE University, Vijayapur, Karnataka, India.
4. Professor, Department of Paediatrics, BLDE University, Vijayapur, Karnataka, India.
5. Resident, Department of Paediatrics, BLDE University, Vijayapur, Karnataka, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Mallanagouda Patil,
Associate Professor, Department of Paediatrics, BLDE University, Vijayapur-586103, Karnataka, India.
E-mail: mmp076@gmail.com

Date of Submission: **Jul 23, 2016**
Date of Peer Review: **Aug 03, 2016**
Date of Acceptance: **Sep 07, 2016**
Date of Publishing: **Nov 01, 2016**

FINANCIAL OR OTHER COMPETING INTERESTS: None.