



International Journal of Veterinary Sciences and Animal Husbandry



ISSN: 2456-2912
VET 2025; SP-10(1): 28-29
© 2025 VET
www.veterinarypaper.com
Received: 14-12-2024
Accepted: 13-01-2025

P Ravi
Associate Professor and Head,
Department of Livestock
Production Management,
Veterinary College and Research
Institute, Udumalpet,
Tamil Nadu, India

C Inbaraj
Assistant Professor, Department
of Veterinary Clinical Medicine,
Veterinary College and Research
Institute, Udumalpet,
Tamil Nadu, India

L Arun
Assistant Professor, Department
of Veterinary and Animal
Husbandry Extension,
Veterinary College and Research
Institute, Udumalpet,
Tamil Nadu, India

R Vivekanandhan
Assistant Professor, Department
of Veterinary Public Health and
Epidemiology, Veterinary
College and Research Institute,
Udumalpet, Tamil Nadu, India

S Vinothraj
Assistant Professor, Department
of Animal Genetic and Breeding,
Veterinary College and Research
Institute, Udumalpet,
Tamil Nadu, India

Corresponding Author:
C Inbaraj
Assistant Professor, Department
of Veterinary Clinical Medicine,
Veterinary College and Research
Institute, Udumalpet,
Tamil Nadu, India

Clinical management of viper envenomation in a Labrador retriever: A case report

P Ravi, C Inbaraj, L Arun, R Vivekanandhan and S Vinothraj

DOI: <https://doi.org/10.22271/veterinary.2025.v10.i1Sa.2007>

Abstract

A one-year-old male Labrador retriever dog was presented with a history of snake bite (Russel's viper) followed by vomiting. On clinical examination, no fang marks could be detected, but the dog was dull and depressed with tachycardia (142bpm) and congested mucous membranes were noticed. Based on history, clinical symptoms and whole blood clotting test, it was diagnosed as viper snake bite. The affected dog was treated with fluids, anti-snake venom, antibiotics and corticosteroid. The kidney and liver function tests were normal and no significant changes were observed. The animal had uneventfully recovery.

Keyword: Labrador, viper envenomation, anti-snake venom, snake bite

Introduction

Snakebite is more common in horses and dogs when compared to other animals such as cattle, sheep and goat due to scarcity of land and human encroachment. In the Indian subcontinent the common venomous snakes encountered are the Indian Cobra (*Naja naja*), Russell's viper (*Daboia russelli*) and the Common Krait (*Bungarus caeruleus*). Snake envenomation may be difficult to diagnose if the incident is not witnessed. Clinical signs may vary greatly depending on the species of snake involved and the quantity and toxicity of the venom injected (Inbaraj *et al.* 2023) [3]. Russel viper is one of the dangerous snakes in Asian continent. Russel's envenomation causes mainly blood coagulation defect and renal failure. Generally, in animals snake bites were reported during grazing, hunting or while playing (Saravanan *et al.* 2017) [4].

Case History and Observation

A one year old Labrador retriever dog was presented with a history of snake bite (Russel's viper) followed by vomiting. The owner informed that his dog was playing in the farm areas and he founded dead Russel viper near by the dog. On clinical examination no fang marks could be detected but the dog was dull and depressed with tachycardia (142bpm) and congested mucous membrane with no swelling in animal body.

Diagnosis and treatment

The blood sample was collected for a Complete Blood Count (CBC) and Serum biochemistry. No significant changes could be detected in CBC values. In serum biochemistry, the kidney and liver function tests were normal. But for 20 minutes the whole blood clotting time was positive which is a standard test for Russel viper envenomation. Based on the owner history, clinical examinations and laboratory findings, it was confirmed as a snake bite case. The affected dog was treated with Inj. Dextrose Normal Saline 10ml/kg IV, one vial of lyophilized polyvalent anti-snake venom, Inj. Enrofloxacin 5mg/kg IM, Inj. Tetanus Toxoid 1ml IM and Inj. Dexamethasone 2mg/kg IM (Ananda *et al.* 2009, Saravanan *et al.* 2017) [1, 4]. The next day, 20 Minutes WBCT was negative and the dog was recovered uneventfully without any clinical signs.



Affected dog



Anti-snake venom

its therapeutic management: A case report. *Bull Environ Pharmacol Life Sci.* 2017;6(11):144-148.

5. Vigneswari M. Snake bite in dogs and its management. *Int J Vet Sci Anim Husb.* 2020;5(4):75-76.

How to Cite This Article

Ravi P, Inbaraj C, Arun L, Vivekanandhan R, Vinothraj S. Clinical management of viper envenomation in a Labrador retriever: A case report. *International Journal of Veterinary Sciences and Animal Husbandry.* 2025;SP-10(1):28-29.

Creative Commons (CC) License

This is an open-access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 International (CC BY-NC-SA 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.

Conclusion

The present study concluded that Russel's viper envenomation in dogs poses a serious threat, necessitating prompt and comprehensive veterinary intervention. Understanding the clinical manifestations, complications and treatment strategies is crucial for improving outcomes in affected animals.

Conflict of Interest

Not available

Financial Support

Not available

Reference

1. Ananda KJ, Mohan K, Kamran A, Sharada A. Snake bite in dogs and its successful treatment. *Vet World.* 2009;12(2):212-213.
2. Arul V, Inbaraj C, Brindha V. Management of snake bite envenomation in an indigenous cow. *J Entomol Zool Stud.* 2020;8(1):844-845.
3. Inbaraj C, Thangapandiyam M, Vigneshwaran S, Monica G, Rama T, Chandrasekaran D, *et al.* Clinical management of snake envenomation in a non-descriptive dog: A case report. *J Krishi Vigyan.* 2023;11(Supple):248-250.
4. Saravanan M, Sivakumar M, Yogeshpriya S, Veeraselvam M, Krishnakumar S, Ranjithkumar M, *et al.* Russell's viper envenomation in Doberman Pinscher and