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Successful therapeutic management of viper envenomation in dogs: A review of five cases

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Abstract

Five dogs (two non-descript, one Labrador, one Chippiparai and one Rottweiler) were presented to Medicine unit of Veterinary Clinical Complex, Namakkal with the history of viper bite. Physical examination revealed bite mark in two dogs, and presence of fangs in one dog. All the animals were presented with dyspnea and salivation. Animals had swollen jaw, oedematous eye lids, tachypnoea and tachycardia. All the animals were administered with polyvalent anti snake venom after evaluating 20 minutes whole blood clotting time (WBCT).

Keywords: Viper bite, salivation, dyspnea, polyvalent anti snake venom

Introduction

Snake bite is common in summer months of the year. In India polyvalent anti snake venom is only available which will be effective against all the four common species; Russell's viper, common cobra, common Krait and saw-scaled viper. Viper bite is more commonly encountered in India. It is difficult to diagnose species of snake bite until witnessed by someone. In dogs and other animals face, jowl, head and legs are main area of bite because of the defense mechanism of the animal. Natural flora of the snake mouth having bacteria like clostridium and pseudomonas. As per World Health Organization report snake bite is a neglected tropical disease. Snake bite in dogs and humans are increased because of lack of land space and human encroachments in animal living area.

Case History and Observation

Five dogs (A 2 year old Chippiparai, 2.5 year old non-described, 5 year old non-described, 4 year old Rottweiler, 5 years old Labrador) were presented to Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with the history of viper bite. Clinical examination revealed dullness, swollen head, face, jowl oedema (Fig.1) and oedematous eyelids. Auscultation of trachea revealed tachypnoea and cardiac auscultation revealed tachycardia. Haematology and serum bicochemistry values were within the normal range. All the animals were brought to hospital campus within 3 hours of bite. Whole Blood Clotting Time was more than 20 minutes.



Fig 1: Jowl edema in a Rottweiler dog

Treatment and Discussion

All the dogs were administered intravenously with 20 ml of polyvalent anti snake venom mixed with 500 ml of Normal saline at the flow rate of 15 drops/min and amoxicillin (@ 20 mg/kg body weight), loop diuretic furosemide (@ 2 mg/kg body weight) (Ananda, *et. al.*, 2009) ^[1]. Haematobiochemical values were within the normal range. Whole Blood Clotting Time was less than 20 minutes in all five dogs 6 hours of post treatment. All the animals were kept under observation for 3 days. There was an absence of variation in haematobiochemical parameters. In contrast to O'shee, 2005 ^[2]. and Wolff, 2006 ^[3]. there won't be any variation on haematobiochemical parameters. Animals were administered with fluids, antibiotics and diuretics for next 2 days. All the animals had uneventful recovery following treatment.

Summary

Successful therapeutic management of viper envenomation in dogs was reported.

Acknowledgement

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