

Asphyxiating Vasculotoxic Snake Bite at Unusual Site

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Abstract: Snake bite is very common among rural population. In this study, we report a young 17yrs. old boy while sleeping in his house at 3:00 am was bitten on his both upper and lower lips and gums. He was brought to our hospital within half an hour in badly angio oedematous face with spreading cellulitis over neck and chest wall .stridor and DIC. He was treated aggressively with massive doses of ASV, fresh frozen plasma; tracheostomy was done after stabilizing his coagulation profile. He was observed for one week. Then his tracheostomy was closed and went home happily.

Keywords: Vasculotoxic snake bite, asphyxia

1. Introduction

Snake bite predominantly occurs in rural population. There are about 3,000 species of snakes identified all over the world out of which India harbours 236 species-including 56 species of venomous ones. Death due to snake bite 1,25,000 globally out of which India contributes 40% .Out of 127 crore population in India. Nearly 75 crore people live in rural area 10% of them i.e 8 crore people are at risk of snake bite at some time during their life.

2. Case Report

A 17yr old boy was brought by his father with a history of snake bite while sleeping in the house along with his grandmother. During sleep he felt some cold object touching his forearm, he just tried throwing it aside but it bit on his lips again and again on his upper and lower lip and inside his gum line as he was startled to find that object as a snake with his wide open mouth. Immediately his father came inside, found the snake and he caught it in his hands and killed the snake. It was found that the species was sawscaled viper. Then he brought his son within 20 minutes to our tertiary care centre. Till that time angio oedema was set in.

On examination, patient's face was swollen with gum bleeding, massive lip oedema, facial oedema with bi lateral sub conjunctival haemorrhage. Subsequently he also had neck oedema with stridor. On admission his whole blood clotting time was 60 minutes. He was treated with massive doses of Anti-Snake Venom; fresh frozen plasma till his coagulation got converted to normal. He was then subjected to tracheostomy. He received a total of 140 vials of ASV & 10 FFPs (Fresh Frozen Plasma). To correct his coagulogram he required such a massive dose. He also had haematemesis, internal bleeding for which he received whole blood and supportive treatment was given. He was observed for one week. His tracheostomy was closed in layers& discharged after that. He was called for follow up after 4 days. He was alright.

3. Investigation

-Whole blood clotting time: 60 mins.
Subsequently, 40, 20, 10 mins.

PT- >2 mins. Control 12 sec./PT=8.2/12.3 control
-CBC: Hb-15.9% TLC-15,400/mm
Platelets-3.5 lacs.
BSL-80mg%
BUL-serum creatinine 19/07
LFTS- S.Bili=0.4mg%
Total: Direct=0.1
SGPT=16 IU/L
SGOT=28 IU/L

4. Discussion

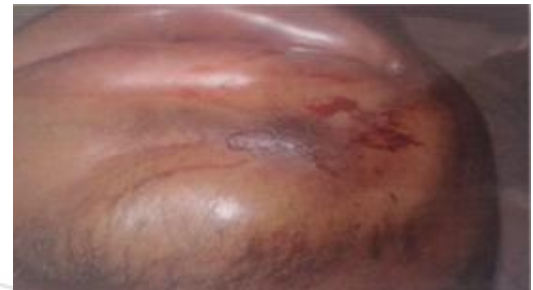
Snake bite is very common among rural farmers of any age group. Most of the fatalities are due to the victim not reaching the hospital in time where definite treatment can be administered. In addition, community is also not well informed about the occupational risks and simple measures which can prevent the bite. In our case patient was brought within half an hour & got the expertise team effort & was aggressively, effectively managed. So we could save the life of these salvageable victims. This was very unusual case of snake bite where the patient was bitten on lips and inner side of gums presented with severe DIC with internal and external bleeding and stridor due to rapidly spreading cellulitis Secondly, he required very massive dose of ASV & FFP to combat his uncontrollable coagulopathy & also he had to undergo tracheostomy which saved his life. So patients of snakebite should reach the hospital in time without going for alternative therapies. The public education is of utmost important Peripheral practicing doctors should be fully trained to tackle emergencies of snake bite with standard WHO guidelines.

References

- [1] Simpson ID. A study of current knowledge base in treating snake bite among doctors in high risk countries of India and Pakistan: Does snake bite treatment training reflect local requirements? Trans R Soc Trop Med Hyg.2008;102:1108-14.
- [2] National snake bite management protocol, India (2008). [online] Available at [www://mohfw.nic.in](http://www.mohfw.nic.in) (Directorate General of Health and Family Welfare, Ministry of Health and Family Welfare,India).
- [3] Warrell DA. WHO/SEARO Guidelines for the Clinical Management of Snake bite in the Southeast

Asian Region. SE Asian J Trop Med Pub Health. 1999;30:1-85.

- [4] Simpson ID, Norris RL. Snakes of medical importance: is the concept of big four relevant and useful? Wilderness Environ Med. 2007;18:2-9.
- [5] AmaralCF, Campolina D, Dias MB, et al. Tourniquet ineffective-ness to reduce the severity of envenoming after Crotalusdurissus snake bite in Belo Horizonte, Minas Gerais, Brazil . Toxicon. 1999
- [6] Bush SP, Hegewald KG, Green SM, et al. Effects of a negative pressure venom extraction device (Extractor) on local tissue injury after artificial rattlesnake envenomation in a porcine model. Wilderness Environ Med. 2000;11:180-8
- [7] Davis D, Branch K, Egen NB, et al. The effect of an electrical current on snake venom toxicity. J Wilderness Med. 1992;3:48-53.
- [8] Anker RL, Staffon WG, Loisselle DS, et al. Retarding the uptake of "mock venom" in humans. Comparison of three first-aid treatments. Med. J Australia 1982;1:212-4.
- [9] TunPe, Aye-Aye-Myint, Khin-Ei-Han, et al. Local compression pads as a first aid measure for victim of bites by Russell's viper (*Daboiarusseliisiamensis*) in Myanmar. Trans R Soc Trop Med Hyg. 1995;89:293-5.
- [10] Norris RL. Bite marks and the diagnosis of venomous snakebite. J Wilderness Med. 1995;6:159-61.
- [11] Simpson ID. Snake bite management in India, the first few hours: A guide for primary care physicians. J. Indian Med Assoc. 2007,105:324-35.
- [12] McLean Tooke AP, Bethune CA, Fay AC, et al. Adrenaline in the treatment of anaphylaxis: what is the evidence? BMJ. 2003;327:1332-5.
- [13] Srimannanarayana J, Dutta TK, Sahai A, et al. Rational use of anti-snake venom (ASV): trial of various regimens in hemotoxic envenomation. J AssocPhys India. 2004;52:788-93.
- [14] Anil A Singh S, Bhalla A, et al. Role of neostigmine and polyvalent antivenin in Indian common krait (*Bungaruscaeruleus*) bite. J Infection Public Health. 2000;3:83-7.
- [15] Paul V Prahlad KA, Earali J, et al. Trial of heparin in viper bites. J AssosPhys of India. 2003;51:163-6



At Discharge



On Admission



After One Week

