International Journal of Health Science

DELAY IN CARE AS A RISK FACTOR FOR SNAKEBITE COMPLICATIONS IN THE STATE OF AMAZONAS

Evelyn Corrêa Oliveira

Universidade de Rio Verde Campus Goianésia

Luiza Rodrigues Oliveira

Faculty of Medicine. Universidade de Rio Verde - UNIRV Rio Verde - Goiás

Monnalisa Silva Lima

Faculty of Medicine. Universidade de Rio Verde - UNIRV Rio Verde - Goiás

Jordana Vaz de Abreu

Universidade de Rio Verde Campus Goianésia

Rhafaela Souza Oliveira

Universidade de Rio Verde Campus Goianésia

Regiany Rodrigues Silva

Universidade de Rio Verde Campus Goianésia

Lara Cândida de Sousa Machado

Faculty of Medicine. Universidade de Rio Verde - UNIRV Rio Verde - Goiás



All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).

Abstract: The Amazon region has a high incidence of delayed care in patients who have been bitten by snakes. Our objective was to describe how the delay in care can be a risk factor in snakebite complications. We used an epidemiological study in order to identify factors associated with delay in care and its relationship with complications using Brazilian research and information systems (DATASUS/BRASIL/MS), during the period from 2015 to 2019. According to the study carried out, it was possible to observe a 97% increase in cases between 2015 and 2019, in the delay of care from 12 to 24 hours after the bite. This delay can be explained by the difficulty in arriving at the medical service and lack of mastery on the part of the medical teams in the application of antivenom at the correct time and dosage. This study highlights the need for a public health strategy aimed at reducing the delay in care and treatment in snakebite patients in the state of Amazonas.

Keywords: Ophidian accidents, Serotherapy, Amazon.

INTRODUCTION

Venomous animals those are produce venom (poison) and have natural conditions to inject it into prey or predators. This condition is naturally given by means of modified teeth, sting, sting, chelicerae, stinging bristles, nematocysts among others. Accidents by venomous animals, especially snakebites, were included by the World Health Organization (WHO) in the list of neglected tropical diseases that most often affect poor populations living in rural areas. Thus, the objective of this work is to present the increase in the number of accidents by venomous animals from 2015 to 2019 in the state of Amazonas (BRASIL, 2020). Snakebite or snakebite is the condition of envenomation resulting from the inoculation of a venom through the inoculation apparatus (tusks) of snakes. In Brazil, venomous snakes of public health interest belong to Families:

Viperidae and Elapidae. Accidents are divided into four types: bothropic accidents (accidents with snakes of the genus Bothrops and Bothrocophias - jararaca, jararacuçu, urutu, caiçaca, train); crotalic accidents (accidents with snakes of the genus: Crotalus - rattlesnake); laquetic accidents (accidents with snakes of the genus: Lachesis - surucucupico-de-jaca); elapidic accident (accidents with snakes of the genera: Micrurus and Leptomicrurus - true coral) (BRAZIL, 2020). Thus, the objective is to evaluate the prevalence of complications resulting from the delay in care in cases of snake bites in the state of Amazonas, in the years 2015 to 2019, in addition to describing how the delay in care can be a risk factor. in complications.

METHODOLOGY

This study is a cross-sectional and descriptive epidemiological survey to quantify the prevalence analysis of the number of snakebite cases in the state of Amazonas that were treated in a period of 12 to 24 hours in the years 2015 to 2019 and the consequences of these visits. late. The variables analyzed were the number of cases and the consequences resulting from snake bites in the state of Amazonas that were treated in a period of 12 to 24 hours, in the years 2015 to 2019. To obtain the data, the information system of diseases was consulted. of DATASUS (TabNet), epidemiological and morbidities, in the axis of notifiable diseases and conditions.

RESULTS AND DISCUSSION SNAKE ACCIDENT AND DELAY IN CARE

Studies carried out in Amazonas showed that of the cases of death by snake bites, 90% had care after 6 hours of the accident², which highlights the importance of sudden care in

these circumstances.

The reason for this delay includes, mainly, the geographic conditions of the Amazon region (rivers, side roads in terrible conditions, dependence on river or land transport) that make it difficult for the patient to arrive at the place of care. ³. However, the situation of those injured by snakes is also aggravated by the behavior taken by health professionals, of not performing serum therapy in patients who arrive at the medical service in a time equal to or greater than six hours after the bite. ¹, which justifies the relevance of the subject in the area of healt.

In the Amazon, the application of antivenom is not performed satisfactorily, amplifying the risk of complications in the patient's prognosis. ⁴. Studies reveal that this underdosage may be recurrent due to the unavailability of serum in rural areas, adding to this factor, it is possible that the delay or non-application of antivenom is explained by the lack of preparation of medical teams to administer the correct dose of antivenom.⁴.

In recent years, the delay in care in snakebite situations has become even more frequent. Between the years 2015 and 2019, there was an increase of about 97% in cases treated within a period of 12 to 24 hours after the accident (Table 1), which denotes the difficulty of the state of Amazonas in supporting this type of incident.

YEAR	NUMBER OF CASES
2015	88
2016	105
2017	146
2018	169
2019	174

Table 1: number of cases that were treated in a period of 12 to 24 hours after snakebite in the state of Amazonas in the years 2015 to 2019.

Source: author. Data obtained from DATASUS 5.

CONCLUSION

It is concluded that Amazonas has a high rate of delay in the care of patients who were bitten by snakes, being evidenced by the 97% increase in this delay in the years 2015 to 2019. It can also be observed that the delay in care for injured patients, it makes it difficult to stabilize the patient, in addition to increasing the possibility of progression to death. This study aims to alert all health professionals about the value of providing quick care to patients injured by snakes and also highlights the need for a public health strategy with the objective of reducing the delay in service, in order to improve prognosis in these cases. in the Amazon.

REFERENCES

- 1. MINISTÉRIO DA SAÚDE. Acidentes por animais peçonhentos: o que fazer e como evitar. **Saúdegov**. Disponível em: < https://saude.gov.br/saude-de-a-z/acidentes-por-animais- peconhentos>. Acesso em: 19 maio. 2020.
- 2. BORGES, Célio Campos; SADAHIRO, Megumi; SANTOS, Maria Cristina dos. Aspectos epidemiológicos e clínicos dos acidentes ofídicos ocorridos nos municípios do Estado do Amazonas. **Rev. Soc. Bras. Med. Trop.**, Uberaba, v. 32, n. 6, p. 637-646, Dec. 1999.
- 3. LIMA, Ana Cristina Silva Ferreira; CAMPOS, Carlos Eduardo Costa; RIBEIRO, José Renato. Perfil epidemiológico de acidentes ofídicos do Estado do Amapá. **Rev. Soc. Bras. Med. Trop.**, Uberaba, v. 42, n. 3, p. 329-335, June 2009.
- 4. FEITOSA, Esaú L, et al. Older Age and Time to Medical Assistance Are Associated with Severity and Mortality of Snakebites in the Brazilian Amazon: A Case-Control Study. **PubMed**, 2015. Disponível em: https://pubmed.ncbi.nlm.nih.gov/26168155/. Acesso em:19, maio, 2020.
- 5. MINISTÉRIO DA SAÚDE. Datasus. 2020.