LOXOSCELISM IN A CANINE: CASE REPORT

LOXOSCELISMO EM CANINO: RELATO DE CASO

LOXOSCELISMO EN CANINO: INFORME DE CASO

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Bruno Borges Santana[1], Lucas Cinquini Cesquim de Souza[2], Kamilla Souza Tayar[3], Indyara Natylla Castro Amaral[4], Isabela Orsi Zuin[5], Laís Campoi Paschoal[6], Victoria Talarico Garcia[7], Katriny Pereira de Freitas[8] and Rodrigo Supranzetti de Rezende[9]

ABSTRACT

The brown recluse spider, of the genus Loxosceles, is an arachnid with non-aggressive behavior that bites only when pressed against the body. Its bite can cause cutaneous clinical manifestations, with slow-healing dermonecrotic lesions, or cutaneous-visceral effects, including acute renal failure due to the nephrotoxic action of the venom. This study reports the case of a six-year-old female Pinscher treated at the Animais e Cia Veterinary Hospital in Uberaba (MG). The patient presented ulcerated wounds on the right thoracic limb, consistent with clinical signs of loxoscelism. The diagnosis was established based on history, lesion characteristics, and exclusion of other conditions. Treatment included topical dressings, antibiotics, analgesics, anti-inflammatory drugs, and symptomatic support, resulting in complete lesion healing after 21 days. This case highlights the importance of early recognition of clinical signs and appropriate therapy to prevent complications and achieve a favorable prognosis.

Keywords: Loxoscelism. Brown Spider. Bite. Female Dog. Dermonecrotic.

RESUMO

A aranha-marrom, do gênero Loxosceles, é um aracnídeo de comportamento não agressivo que pica apenas quando comprimida contra o corpo. Sua picada pode causar manifestações clínicas cutâneas, com lesões dermonecróticas de cicatrização lenta, ou cutâneo-viscerais, que incluem insuficiência renal aguda devido à ação nefrotóxica do veneno. Este trabalho

[1]Undergraduate student in Veterinary Medicine. University of Uberaba (UNIUBE).
E-mail: brunobsantanavet@gmail.com
[2]Undergraduate student in Veterinary Medicine. University of Uberaba (UNIUBE).
E-mail: lucas.cesquim@edu.uniube.br
[3]Undergraduate student in Veterinary Medicine. Educational institution: University of Uberaba (UNIUBE).
E-mail: kamillatayarvet@gmail.com
[4]Undergraduate student in Veterinary Medicine. University of Uberaba (UNIUBE).
E-mail: indyaraveterinaria@gmail.com
[5]Master's student in Animal Health and Production in the Tropics. University of Uberaba (UNIUBE).
E-mail: iisabelaorsi@gmail.com
[6]Graduated in Veterinary Medicine. University of Uberaba (UNIUBE).
E-mail: laiscampoi2102@gmail.com
[7]Graduated in Veterinary Medicine. University of Uberaba (UNIUBE).
E-mail: vitoriatalarico@hotmail.com
[8]Specialization in Residency in small animal medical clinic. University of Uberaba (UNIUBE).
E-mail: katriny.medvet@yahoo.com.br
[9]Dr. in Veterinary Sciences. University of Uberaba (UNIUBE).
E-mail: rodrigo.rezende@uniube.br

relata o caso de uma cadela da raça Pinscher, com seis anos de idade, atendida no Hospital Veterinário Animais e Cia, em Uberaba (MG). A paciente apresentava feridas ulceradas no membro torácico direito, compatíveis com sinais clínicos de loxoscelismo. O diagnóstico foi estabelecido com base no histórico, características das lesões e exclusão de outras condições. O tratamento incluiu curativos tópicos, antibióticos, analgésicos, anti-inflamatórios e suporte sintomático, resultando em cicatrização completa das lesões após 21 dias. O caso reforça a importância do reconhecimento precoce dos sinais clínicos e da terapia adequada para evitar complicações e alcançar um prognóstico favorável.

Palavras-chave: Loxoscelismo. Aranha-Marrom. Picada. Cadela. Dermonecrótica.

RESUMEN

La araña marrón, del género Loxosceles, es un arácnido de comportamiento no agresivo que pica solo cuando es comprimido contra el cuerpo. Su picadura puede causar manifestaciones clínicas cutáneas, con lesiones dermonecróticas de cicatrización lenta, o cutáneo-viscerales, que incluyen insuficiencia renal aguda debido a la acción nefrotóxica del veneno. Este trabajo relata el caso de una perra de raza Pinscher, de seis años de edad, atendida en el Hospital Veterinario Animais e Cia, en Uberaba (MG). La paciente presentaba heridas ulceradas en el miembro torácico derecho, compatibles con signos clínicos de loxoscelismo. El diagnóstico se estableció con base en el historial, las características de las lesiones y la exclusión de otras condiciones. El tratamiento incluyó curaciones tópicas, antibióticos, analgésicos, antiinflamatorios y soporte sintomático, lo que resultó en la cicatrización completa de las lesiones después de 21 días. Este caso refuerza la importancia del reconocimiento temprano de los signos clínicos y de una terapia adecuada para evitar complicaciones y lograr un pronóstico favorable.

Palabras clave: Loxoscelismo. Araña Marrón. Picadura. Perra. Dermonecrótica.

1 INTRODUCTION

Loxoscelism is the envenomation caused by the accidental bite of arachnids of the genus Loxosceles, commonly known as brown spiders. In Brazil, several species have been described, with the main causes of accidents being *Loxosceles intermedia*, *Loxosceles laeta* and *Loxosceles gaucho*. These spiders have a body of about 1 cm and a wingspan of up to 3 cm (Brasil, 2001).

Brown spiders have the habit of building irregular webs in places protected from direct light, such as crevices in ravines, under tree bark, between tiles and stacked bricks, and behind paintings and furniture. Although they are not aggressive, they sting when compressed against the body, which often occurs when they take refuge in clothing inside homes (Brasil, 2001).

The bite of the brown spider can cause a necrotic inflammatory lesion with gravitational progression. The pain varies from mild to severe in the first 2 to 8 hours, and there may be itching, swelling and tenderness. Over the days, the lesion can evolve to the formation of a blister or vesicle with a halo of ischemic tissue, which can become hemorrhagic (Silva, 2004).

The diagnosis of loxoscelism is rarely based on the identification of the spider, since the capture of the arachnid is uncommon. Thus, the diagnosis is made through epidemiological findings, histories, and clinical signs and symptoms, in addition to the exclusion of other etiologies (Wright, *et al.*, 1997; Sezerino, *et al.*, 1998; Vetter, 1999; Málaque *et al.*, 2002).

The present study aims to report a case of loxoscelism in a dog in the city of Uberaba, Minas Gerais State, Brazil, highlighting its clinical symptomatology and therapeutic approach.

2 THEORETICAL FRAMEWORK

Spiders of the genus *Loxosceles*, popularly known as brown spiders, are cosmopolitan, originating in Africa and the Americas, and measure from 1 to 5 cm from one end to the other. These arachnids have nocturnal and intradomiciliary habits, sheltering in dark places such as beds, basements, bricks, rubble and under furniture. Their behavior is predominantly sedentary and non-aggressive, attacking only when threatened or compressed (ASSIS et al., 2023).

The action of the venom after the bite, according to Martines et al. (2023), is initially painless, which makes early diagnosis difficult. The toxins present, especially sphingomyelinase D, promote local tissue destruction, generating inflammatory lesions, edema, and necrosis. In more severe cases, systemic spread occurs, leading to acute renal

failure, coagulation disorders, and potentially death. The manifestations can be cutaneous or cutaneous-visceral, the latter being associated with greater lethality.

Regarding laboratory findings in cases of loxoscelism, alterations such as leukopenia, neutropenia, and regenerative anemia are observed in blood counts and white blood counts. Biochemical analyses often show hypoalbuminemia, increased urea and creatinine, indicating severe renal impairment (MARTINES et al., 2023).

One of the fundamental factors for the early diagnosis of loxoscelism is the characterization of the wound, with the help of imaging tests, such as ultrasonography and radiography, in addition to laboratory tests such as blood count, leukogram and biochemistry. The correct identification of the clinical picture, associated with a detailed anamnesis and the rapid initiation of treatment, is essential to reduce the complications associated with *Loxosceles poisoning*.

3 CASE REPORT

A 6-year-old Pinscher dog, weighing 3.2 kg of body mass, unvaccinated, dewormed and not neutered, was treated at the Veterinary Hospital Animais e Cia on August 5, 2024.

3.1 HISTORY

The owners reported that, five days ago, they heard a bark followed by the animal's cry in the garden of the residence, where there is a history of infestation by spiders. After the episode, they noticed that the animal began to avoid support by the right thoracic limb and when examining the paw, the owners observed a reddish area on the right palmar pad, with an appearance similar to a burn. Two days later, the region evolved into a phlyctena that ruptured.

3.2 PHYSICAL EXAMINATION

During the consultation at the Hospital Veterinário Animais e Cia, the dog's clinical parameters were normal, with a heart rate of 120 beats per minute (bpm), respiratory rate of 20 movements per minute (mpm), temperature of 38.7°C, normal mucous membranes with capillary filling time (TPC) of 2 seconds, blood glucose of 120 mg/dl and hydrated. However, the right thoracic limb presented an ulcerated wound in the interdigital region (Figure 1B), with an increase in volume at two points: one in the radius and the other in the carpal joint (Figure 1A). The area was fluctuating, painful, with edema throughout the skin, which was purplish in color and drained bloody secretion. The main suspicions were spider bites or abscesses.

Figure 1

A- *Injury to the right thoracic limb with increased volume in the region of the radiocarpal joint (blue circle);* ***B-*** *Interdigital ulcerated wound on the right thoracic limb (blue circle). Canine patient of the pinscher breed, treated at the Veterinary Hospital Animais e Cia with suspicion of loxoscelism.*

Source: Prepared by the authors.

3.3 COMPLEMENTARY EXAMS

The following tests were requested: complete blood count (Table 1), biochemical profile (Table 2), and radiographic examination (Figures 2A and 2B) to rule out the possibility of fracture or osteomyelitis. In the complete blood count (Table 1), thrombocytopenia was observed, with 124,000 platelets/mm³ (reference values: 180,000 – 400,000/mm³), although there was platelet aggregation, in addition to lymphopenia, with 91.00/mm³ (reference values: 720 – 5400/mm³). In the biochemical profile (Table 2), there was a decrease in albumin levels, with 2.10 g/dL (reference values: 2.3 to 4.0 g/dL), and creatinine, with 0.41 mg/dL (reference values: 0.5 to 1.5 mg/dL), while the other parameters were within normal limits.

Table 1

Blood count of a 6-year-old dog, Pinscher, with a possible diagnosis of brown spider bite (loxoscelism) treated at the Hospital Veterinário Animais e Cia.

Erythrogram	Value of the Animal	Reference Value	Interpretation
Erythrocytes	6.50 million/mm³	5,5 – 8,5	Normal
Hemoglobin	12.7 g%	12 – 18	Normal
Haematocrit	38,10%	37 – 55	Normal
Plasma Protein	7.2 g/dL	6,0 – 8,0	Normal
VCM	58.62 fl	60 – 77	Below normal
CHCM	33.33 g/dL	31 – 34	Normal

HCM	19.54 pg	19,0 – 23,0	Normal
Platelets	124,000 /mm³	180.000 – 400.000	Below normal
Leukogram	**Value of the Animal**	**Reference Value**	**Interpretation**
Total Leukocytes	9100 /mm³	6000 – 18000	Normal
Rods	05% (455.00 /mm³)	0,0 – 500	Normal
Targeted	82% (7462.00 /mm³)	3600 – 13800	Normal
Lymphocytes	01% (91.00 /mm³)	720 – 5400	Below normal
Monocytes	10% (910.00 /mm³)	180 – 1800	Normal
Eosinophils	02% (182.00 /mm³)	120 – 1800	Normal

Source: SGV-HVU System, 2024.

Table 2

Biochemist of a 6-year-old dog, Pinscher, with a possible diagnosis of brown spider bite (loxoscelism) treated at the Hospital Veterinário Animais e Cia.

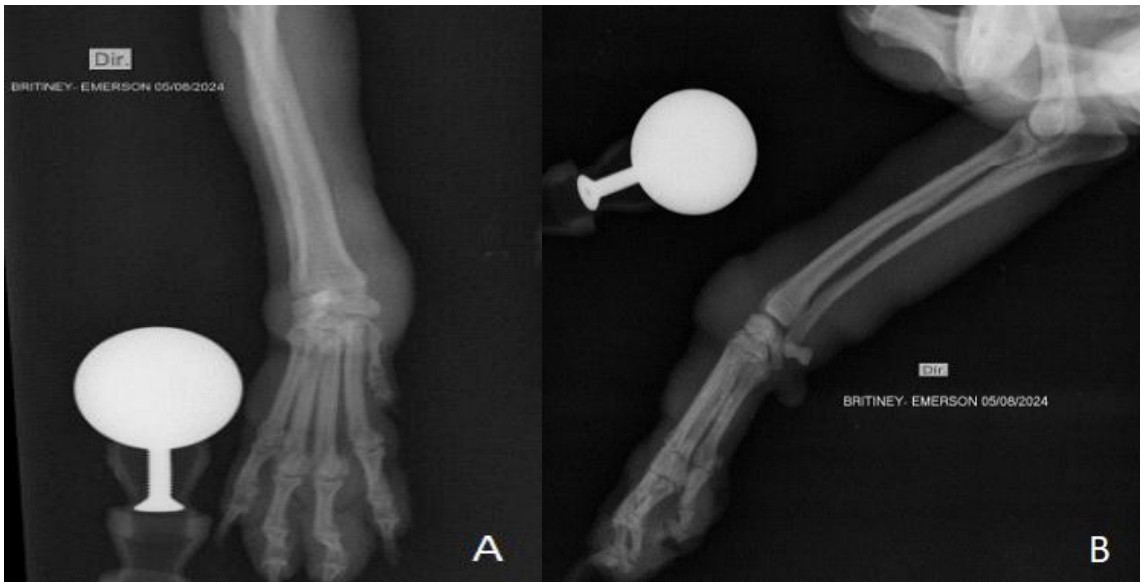
Biochemical	Value of the Animal	Reference Value	Interpretation
ALT	26.4 U.I./L	21.0 to 102.0 U.I./L	Normal
Total protein	6.46 g/dL	5.2 to 8.2 g/dL	Normal
Albumin	2.10 g/dL	2.3 to 4.0 g/dL	Below normal
Globulin	4.36 g/dL	2.5 – 4.5 g/dL	Normal
Albumin Globulin Ratio	0,48	0,75 – 1,9	Below normal
Creatinine	0.41 mg/dL	0.5 to 1.5 mg/dL	Below normal
Alkaline phosphatase	77.0 U.I./L	23 to 212 U.I./L	Normal
GT Range	5.7 U.I./L	0 to 11 U.I./L	Normal
Urea	45.7 mg/dL	15.0 to 60.0	Normal

Source: Hospital Veterinário Animais e Cia, 2024.

Radiographic examination (Figures 2A and 2B) showed no signs of fracture and/or dislocation, preserved bone radiopacity, good joint congruence, and enlargement of adjacent soft tissues, which may be related to an inflammatory process.

Figure 2

A- Radiographic image in palmar dorsal projection; B- Radiographic image in right mid-lateral projection. Note that in both projections there is an increase in adjacent soft tissues, related to local inflammatory edema (blue circle). Dog, Pinscher, 6 years old, treated at the Veterinary Hospital Animais e Cia.



Source: Prepared by the authors.

3.4 TREATMENT

Methadone at a dose of 0.1 mg was performed subcutaneously in the interscapular region for pain relief, followed by trichotomy of the entire right phalangeal metacarpal region, drainage of the wound in the region of the radiocarpal joint, washing with 0.9% saline solution and chlorhexidine degerming, dressing with the use of collagen-based ointment, and then wrapped in sterile gauze and bandage.

As there was no indication for hospitalization, medication for home use was prescribed, including cephalexin (75mg), every 12 hours for 10 days; prednisolone (5mg), once a day for 5 days and sodium dipyrone drops (25mg) for the administration of 3 drops orally, every 8 hours for 4 days, in addition to ointment based on fibrinolysin, deoxyribonuclease and chlorophenicol, for topical use after cleaning the wound with 0.9% saline solution, and it is necessary to perform the dressing twice a day. The return visit was scheduled for five days after the start of treatment for reassessment and follow-up.

The owners returned on August 9 (five days after the accident), reporting that the animal was active, feeding and hydrating properly. However, they noted that he had vomited the day before, after ingesting a large amount of food provided. The clinical parameters were within the reference values: heart rate of 100 bpm, respiratory rate of 16 mpm, rectal temperature of 37.9°C and blood glucose of 133mg/dL.

On examination of the wound in the right carpal and interdigital radius joint (Figure 3A), multiple orifices in the skin were observed, with necrotic borders, without the presence of secretion or edema. On the palmar surface of the digits of the right thoracic limb (Figure 3B), the borders had an erythematous area, indicating interdigital ulceration. The lesion was cleaned with chlorhexidine degerming, followed by irrigation with 0.9% saline solution and application of a dressing using collagen ointment, sterile gauze and bandage.

In addition to the previously prescribed medications and dressings, the administration of omeprazole 10mg every 12 hours for 10 days was indicated.

Figure 3

Characteristics of the lesion five days after the accident, observe in A- Dorsal view of the right thoracic limb, showing wounds located in the radiocarpal joint (blue circle) and in the interdigital region. (red circle); B- Ulcerated wound on the palmar surface of the digits of the right thoracic limb (blue circle). Canine patient of the Pinscher breed, treated at the Veterinary Hospital Animais e Cia.

Source: Prepared by the authors.

On August 14 (nine days after the accident), the owners returned for evaluation of the wound and reported that the animal showed clinical improvement, without episodes of vomiting and already supporting the right thoracic limb. The medications prescribed in the previous consultations were being administered as directed, as well as daily cleaning and dressing.

The animal's clinical parameters were within the normal range: rectal temperature of 38.2°C, blood glucose of 121mg/dL, respiratory rate of 28 movements per minute and heart rate of 132 beats per minute. The wound in the radius region and in the radiocarpal joint was in the process of healing (Figure 4A), with no presence of necrotic tissue or secretion. The

area between the right palmar pads was healed (Figure 4B). The cleaning and dressing procedures were maintained as in previous consultations.

In view of the evolution of the healing process, it was decided to replace the ointment based on fibrinolysin, deoxyribonuclease and chlorophenicol, with ointment based on gentamicin sulfate, sulfanilamide, sulfadiazines, urea and vitamin A palmitate, to be applied after cleaning and dressing, until further recommendation.

Figure 4

Injury to the right thoracic limb nine days after the accident, observe in ***A:*** *Lesion in the process of healing, without necrotic tissue in the region of the radiocarpal joint (blue circle) and interdigital joint of the right thoracic limb (red circle).* ***B:*** *Wound in the process of healing (red circle) on the palmar aspect of the digits of the right thoracic limb. Canine patient of the pinscher breed, treated at the Veterinary Hospital Animais e Cia.*

Source: Prepared by the authors.

On August 26, 2024 (21 days after the accident), the owner returned for reassessment of the wound on the right thoracic limb, reporting that the animal is alert, feeding and hydrating as before. In his physical evaluation, temperature was 37.8°C, blood glucose 137, systolic blood pressure 120, heart rate 112bpm and respiratory rate 24mpm.

The wounds are completely healed (Figures 5A and 5B), without swelling, exudate or necrosis, and no more pain during site manipulation.

For home treatment, the veterinarian kept the topical ointment based on gentamicin, sulfanilamide, sulfadiazine, urea and vitamin A every 12 hours for another seven days to assist in skin healing and added the vitamin supplement based on refined fish oil, DL-Alpha-Tocopherol, BHT (Butylhydroxytoluene) for oral use every 24 hours for 30 days to help hair growth in the areas of lesions, there was no longer a need for a dressing, returning for reassessment after 15 days.

Figure 5

Injury to the right thoracic limb 21 days after the accident, see in ***A:*** *Injury to the region of the right radial carpal joint that has completely healed (blue circle), and to the interdigital region of the right thoracic limb (red circle).* ***B:*** *Lesion on the palmar surface of the digits of the right thoracic limb completely healed (red circle). Canine patient of the pinscher breed, treated at the Hospital Veterinário Animais e Cia with suspected loxoscelism on August 05, 2024. Uberaba-MG*

Source: Prepared by the authors.

4 RESULTS AND DISCUSSIONS

To obtain an accurate diagnosis, it is necessary to visualize the arachnid, however, after the attack, the spiders tend to flee, which makes it difficult to identify. As a result, in most cases, treatment is conducted based on the presumptive diagnosis, excluding other possible causes, and in the case reported, the owner also mentioned the presence of other spiders in the area (Duarte, *et al.*, 2018).

The patient presented a picture of thrombocytopenia in the blood count, which is compatible with the findings of Almeida (2020), since intravascular coagulation is a constant finding in *Loxosceles sp accidents*, occurring early due to the intense consumption of platelets during hemorrhage at the bite site.

In addition, the presence of significant lymphopenia was found in the patient's examination, due to the redistribution of leukocytes to the injured tissues due to the cytotoxic action of the venom. However, previous studies indicate that the occurrence of leukopenia associated with neutropenia is more common, resulting from the intense migration of neutrophils to the affected areas (Almeida, 2022). However, in the complete blood count, the rod and segmented values were within the reference limits, with no changes in neutrophils.

Biochemical examination shows the presence of hypoalbuminemia, with albumin being the most abundant plasma protein. Its decrease is related to several factors, among which

hemorrhage stands out, which explains the reduction in the exam performed (Fernandes, 2023).

According to Futrell (2020), after the bite of spiders of the genus *Loxosceles* sp, it is common for kidney functions to be compromised, evidenced by clinical signs and laboratory results, such as changes in urine and increased levels of creatinine in the blood. However, the biochemical examination performed showed lower levels of creatinine, which contradicts the literature.

The treatment occurred according to the patient's symptoms, since the antiloxocelic serum is not available in veterinary medicine, making it necessary to perform the therapy based on the clinical signs observed (Bruni, *et al.*, 2022). Currently, the anti-arachnid serum (Loxosceles, Phoneutria and Tityus) is obtained from the plasma of horses hyperimmunized with a mixture of spider venoms of the genera *Loxosceles* sp ("brown spider") and *Phoneutria* sp ("wood spider") and venoms of scorpions of the genus Tityus (Butantan Institute, 2022). Therefore, it can be used intravenously when the human being is bitten by a spider or scorpion of the genera mentioned above and its action is to neutralize the venom in the bloodstream. Therefore, there is no indication for the administration of serum in animals bitten by spiders, as no studies have been done to know the reaction that could cause in each species, in addition, the diagnosis mainly related to brown spider bites is most often suggestive, since it is very difficult for the tutor to be able to confirm that his animal has been bitten by this species of spider.

According to Crivellenti et al. (2023), it is essential for treatment to perform cleans with saline solution and antiseptics, broad-spectrum antibiotics, analgesia with the use of opioids for pain relief, corticosteroids, cold compresses, and fluid therapy with lactated ringer's in cases of dehydration and intense hemoglobinuria to avoid acute tubular necrosis. As previously mentioned, the animal in the case report had a reddish area on the right thoracic limb on the palmar cushion and two days later it evolved into a phlyctena that ruptured, in addition, the area was floating, swollen, painful, purplish and drained a bloody secretion. Thus, the treatment of choice was carried out following the guidelines of the literature. For analgesia, an opioid drug (methadone) was administered, given the intense pain of the right thoracic limb caused by the lesions, as also described in the literature (Crivellenti, *et al.*, 2023)

Second-intention treatment involves keeping the wound open, allowing healing to occur from the inside out, with the gradual formation of granulation tissue. This approach is suitable for extensive, contaminated wounds or wounds with irregular edges, where a more extensive cleaning and debridement process is required (BIZINOTO *et al.*, 2022). In this case,

the treatment was carried out exactly as indicated, since the site was trichotomy, the wound was washed with 0.9% saline solution and cleaned with chlorhexidine degerming, which is a topical antiseptic indicated to clean and disinfect the skin. As an ointment, one based on fibrinolysin, deoxyribonuclease and chlorophenicol was indicated, which is used in infected skin lesions and is the combination of active enzymes and bacteriostatic antibiotic.

In addition, cephalexin was added to the home prescription as a systemic medication for the disease, which is an antibiotic indicated to treat dermatological infections and infections of other systems, such as the urinary tract. Therefore, the indication was the prevention of bacterial infection of the wound, as it is a favorable environment for the proliferation of bacteria, since the skin was not intact and had drained a bloody secretion. The same prophylactic protocol is indicated by Krawhwinkel and Boothe (2006), who state that all types of wounds have some risk of becoming infected and colonized by a wide variety of microorganisms, including bacteria.

In addition, prednisolone, a steroidal anti-inflammatory drug, was prescribed, indicated in the case report to reduce inflammation and stabilize mast cell membranes, as the wound showed clear signs of an inflammatory process, such as redness, pain, and edema. Sodium dipyrone, a non-steroidal anti-inflammatory, analgesic and antipyretic, was prescribed with the aim of providing mild analgesia to the animal at home. Finally, omeprazole, an inhibitor of gastric acid secretion, was prescribed due to the risk of irritation of the stomach mucosa and the occurrence of vomiting due to the use of antibiotics (Crivellenti, *et al.*, 2023)element.

In more severe cases in which there is anemia, profuse bleeding, thrombovitopenias or coagulopathies, blood or blood product transfusions should be performed and, after stabilization of the condition, reconstructive surgeries may be necessary, such as surgical debridement of the necrotic areas (Crivellenti, *et al.*, 2023). However, as previously reported, the wound in the case in question was less severe, being only reddish, swollen, purplish, painful and draining secretion, in addition to the initial phlyctena that ruptured. Therefore, it was not necessary to start a blood transfusion or reconstructive surgeries, and only a second-intention treatment and systemic and topical medications were indicated.

In topical treatment, the use of ointment based on fibrinolysin, deoxyribonuclease and chlorophenicol in skin wounds has been shown to be effective, since it stimulates the formation of granulation tissue, helping to accelerate the healing process (Santos *et al.*, 2022). Thus, for these reasons, this was the topical medication of choice, mainly because the wound was initially infected. Soon after, the skin treatment was changed to the ointment based on gentamicin, sulfadiazine, urea and vitamin A, because in this second phase the risk

of necrosis of the lesion had already been remedied, so we opted for this drug that has the function of re-epithelialization, accelerating healing.

In addition, on radiographic examination, an increase in adjacent soft tissues was observed, possibly related to the inflammatory process, since the venom contains the enzyme hyaluronidase, which has a hydrolyzing action on the connective tissue, causing the degradation of hyaluronic acid. This mechanism facilitates the penetration of the venom into the cells and tissues of the injury site, contributing to the dissemination of the lesion in a gravitational manner (Silva Junior; Alves, 2021).

In general, soon after the bite, the patient does not feel any pain, so it is often difficult to identify the causative agent of the injury (Silva, 2016), which occurred in the case reported, given that the diagnosis was made by the characteristics of the injury and its similarity to the spider bite, in addition to the history of the animal's owner, when reporting that he has already observed these arachnids in the place.

The venom of *Loxosceles* sp. has cytotoxic action, having sphingomyelinase D (phospholipase D) as its main enzyme, therefore, the interaction of the enzyme with the constituents of the cell membrane causes a severe inflammatory process at the site of the bite, thus leading to the activation of the cascade of the complement system, coagulation and platelets. (Aguiar *et al.*, 2020).

The complement system is composed of plasma proteins that can be activated in two ways: directly by pathogens or indirectly by antibodies bound to these pathogens. This process generates a series of responses on the surface of the pathogen, producing active components with various effector functions. In the case in question, the arachnid's venom acted as the anomalous molecule that the organism needed to fight. Hemostasis, in turn, is the mechanism by which the body controls bleeding, involving the clotting process. Thus, when the bite occurred, the blood vessels suffered vasoconstriction, which reduced blood flow and started the clotting process. The accumulation of blood outside the vessel formed a hematoma that, by pressing on the vessel, helped prevent further hemorrhage, which resulted in a purplish coloration to the wound. Platelets, components of the hemostatic system, aggregate to form a mesh that contributes to wound closure. In addition, edema, pain, and drainage of bloody substances are manifestations of skin inflammation (Streiff, 2023).

The clinical syndrome associated with spider bites of the genus *Loxosceles* can manifest in two ways: cutaneous or cutaneous-visceral (hemolytic). The cutaneous form presents dermonecrotic lesions of delayed healing, being the most common and least severe. In contrast, the cutaneous-visceral form is more severe, as it can lead to acute renal failure

due to the nephrotoxic and hemolytic action of the venom, which can result in death (Silva, 2016; Duarte *et al.*, 2018). The patient may develop acute renal failure due to the formation of microthrombi, hemolysis, and glomerular lesions resulting from damage to the glomerular basement membrane (Cardoso *et al*., 2003). In the case in question, the clinical syndrome correlates with the cutaneous form, as there were lesions on the skin, but no renal alterations compatible with the hemolytic form were observed.

5 CONCLUSION

In view of the reported case, it is concluded that the clinical management and diagnosis of spider bite accidents of the genus *Loxosceles* sp are complex, mainly due to the absence of antiloxocephalic serum in veterinary medicine and the difficulty in identifying the arachnid for diagnostic confirmation. The current treatment is based on the patient's symptomatology and therapeutic choice, including the use of anti-inflammatories, antibiotics and healing agents, which has been shown to be effective in managing the lesion. Thus, the importance of rapid diagnosis and treatment is emphasized, which directly influences a favorable prognosis and a reduction in the mortality rate.

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