

CENTIPEDE (*Scolopendra gigantea* Linneaus 1758) ENVENOMATION IN A NEWBORN

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SUMMARY

The first case of centipede (*Scolopendra gigantea* Linneaus 1758) envenomation in a newborn is reported. When first examined, approximately 6 hours after the bite, the 28-day-old girl was irritable, with uncontrollable cry and intense local pain, oedema, local hyperthermia, and blood clots at punctures. Uncontrollable crying in neonates should rise the possibility of an insect or arachnid sting.

KEY WORDS: *Scolopendra gigantea*; Envenomation; Venom; Neonate.

INTRODUCTION

Venezuela has an abundant diversity of venomous animals including species of spiders, snakes, molluscs, jellyfish, scorpions, and snakes that cause a high incidence of envenoming⁶.

Envenomation by any species of the genus *Scolopendra* (scolopendrim) produces defined sort of signs and symptoms in adults^{1,5,8,12}. Oedema, erythema, intense pain, local lymphangitis, dizziness and necrosis at the site of the bite⁵ are frequently found. Accidents are not rare in adults but severe envenomings with death are exceptional^{2,8}. Nevertheless, as far as we know scolopendrim in the newborn has not been yet reported. There is a marked seasonal influence in the incidence of scolopendrim, peaks being associated with the dry season. The incidence is also influenced by factors such as increased urbanisation or proximity of houses to the forest, and inadequate insect management.

CASE REPORT

On January 1999, a 28-day-old newborn girl (3,700-g weight) was seen at Capaya rural health centre (Miranda state, Venezuela), suffer a scolopendra bite. While sleeping in bed at 2 o'clock in the morning, she waked up and began in uncontrollable cry. Shortly after that, her mother saw two bites on the dorso of the left hand and found and captured a dark brown centipede with yellow extremities in the bedclothes.

When first examined, approximately 6 hours after the bite, the girl was irritable, with an uncontrollable cry, and intense local pain, oedema, local hyperthermia, and blood clots at punctures. One hour after admission to a health facility she had an extensive hand and arm oedema, with patchy areas of erythema. She had become very irritable and refused

bottle-feeding. Her pulse rate was 122 beats per minute and temperature was 38 °C. She was treated with hydrocortisone endovenous and oral acetaminofen. Three hours after hydrocortisone administration, hand and arm oedema decreased and subsided 72 hours later. Punctures at the site of the bite remained red-purplish and hyperesthesia was observed around the site. The patient also presented hypersomnolence and hyporexia. After 3 days, she fed normally and her behaviour and activity were normal.

Complementary exams: When arriving the patient to the Hospital were carried out laboratory exams repeated at the 24 hours, as shown in Table 1.

Table 1
Complementary exams

	T ₀	T ₂₄
Haemoglobin g/mL	12	12
Haematocrit (%)	36.2	38.4
Leukocyte count (mm ³)	20.9 x 10 ³	9.9 x 10 ³
Prothrombin time (control: 13'')	12''	12''
Partial thromboplastin time (control: 28'')	27''	28''
Ureic nitrogen (BUN)(normal values: 10-20 mg/100 mL)	14	17
Creatinine (normal values: 0.5-1.3 mg/100mL)	1.0	1.4

T₀: at admission; T₂₄: 24 hr after the bite.

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DISCUSSION

In 1999 only seven patients with suspected scolopendra-bite were admitted to hospital in north central Venezuelan region¹⁰. It is likely that this number of cases underestimates significantly the actual number of scolopendra-bites, as many patients attend medical facilities other than hospitals, mainly in country regions, and many of them may not seek medical attention at all. Also, as only definitive scolopendra-bite has been recorded, a number of cases of actual scolopendra-bite probably have been neglected because of lack of positive identification of a scolopendra, in spite of clinical features of envenoming.

This newborn had many evidences of scolopendra envenomation and her mother brought the animal to the hospital. But, in venomous-bites in humans, in the majority of suspected cases there is not enough evidence to establish with certainty whether or not a bite has occurred. The patient, with the exception of a leukocytosis did not present any alteration of the haematological or biochemical counts.

Likewise, the symptoms and signs presented by the patient are not pathognomonic of scolopendra envenomation, since they could also be seen after snakes bites and stings by other arthropods.

A retrospective study of records from National Ministry of Health⁹ reported only twelve cases of scolopendra bite in the last 30 years, all of them involving adult's victims. This study has shown that scolopendra-envenomation in childhood is a rare event.

There is very little literature on venomous scolopendromorphs and the effect of their venoms on man. However, there are ancient reports stating that man is extremely sensitive to the venom^{3,5}. All scolopendromorphs are venomous, but as they have nocturnal activity, their first impulse, when perceive light is to retreat to the dark. In our country, bites in adults have not important consequences. They usually occur when scolopendra are trapped in clothing, shoes, and so on, particularly when they are looking for food as in the dry season months. The scolopendra venom is poorly studied¹, but at least in some species, contains proteins, lipids, lipoproteins, histamine, hyaluronidase, polypeptides, benzokinin derivatives, and proteinases^{4,7}.

RESUMIO

Envenenamiento por un centípedo (*Scolopendra gigantea* Linneaus 1758) en un recién nacido

Se reporta el primer caso de un envenenamiento por un centípedo (*Scolopendra gigantea* Linneaus 1758) en un recién nacido. Cuando

fue examinada, aproximadamente a las 6 horas de la picadura, la niña de 28 días de nacida, estaba irritable, con un llanto incontrolable e intenso dolor, edema e hipertermia local y presencia de coágulos en los orificios de la picadura. El llanto incontrolable en neonatos, puede plantear la posibilidad de una picadura de insecto o arácnido.

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