

A "SUNSPIDER" (ARACHNIDA, SOLPUGIDA) BITE ACCIDENT IN A HUMAN PATIENT

ACCIDENTE PROVOCADO POR UNA "ARAÑA DE SOL" (ARACHNIDA, SOLPUGIDA) EN UN PACIENTE HUMANO

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SUMMARY

This work describes a representative of the Solpugida order producing a human accident. The habitat where it was found and some characteristics of the specimen are reported, in order to call the attention on an almost unknown biological group in Venezuela.

RESUMEN

Este trabajo se refiere a un representante del orden Solpugida, produciendo un accidente en un humano. Se reporta el hábitat donde fue hallado y algunas características del ejemplar, a fin de llamar la atención sobre un grupo biológico muy poco estudiado en Venezuela.

Keywords: Arachnida, Solpugida, sunspider, arachnid bite, Venezuela

Palabras clave: Arachnida, Solipugida, araña de sol, accidente por arácnido, Venezuela.

INTRODUCTION

About 1000 species Solifugae or Solpugidae are known around the earth. Sunspiders, also commonly known as solpugides, due to their Order name Solpugida, are in fact not spiders at all. They are large, peculiar-looking spider-like creatures, moving quickly across the ground (Corey and Stout, 1990). They are usually active during the day in sunny weather and hunt prey from which they extract body fluids. They are not dangerous to humans and have no venom glands, but can give a nasty bite.

Solifugids appear to have 10 legs but in fact, the first pair of appendages are the pedipalps that are very strong and are used for various functions such as drinking, fighting, feeding and mating. The first pair of legs are thin and short and used as tactile organs. The fourth pair of legs are the longest and strongest and carry white structures called racket organs-the purpose of which is not known (Diappenaar, 1993).

Six species occur in Europe and these are found in the warmer regions such as Spain and Greece, and the Balkans (Cloudesley-Thompson, 1961). Ten families are known and are all from the Old-World (Cloudesley-Thompson, 1968). They has also been described for the New World, even they are not well studied (Chamberlin 1925; Cekalovic, 1976; Maury, E.A; 1985). In Venezuela there are only two papers in the bibliography found for us, corresponding to Caporiacco (1951), in a sample send to him by Prof. Dott Rácenis from the Universidad Central de Venezuela, and Maury (1982).

RESULTS

Case report. On February 21, 2001, young adult male was seen at Tropical Medicine Institute (TMI) (Caracas, Venezuela), suffering a sunspider bite. The patient came from the "El Valle" parish, "Libertador" municipality, Caracas, Venezuela. While sleeping on bed at 7 o'clock in the morning, he waked up felting an intense pain in the dorsum of his right forearm. A big sunspider was bitten

him producing a bleeding wound of 3 mm long. The lesion was painful, but non redness or swelling was seen throughout the next 3 hours when the patient was observed at the clinical consult of the TMI. The wound was treated with hydrogen peroxide and the patient received oral analgesic (acetaminofen). Knowing the non-toxic nature of sunspider bite, the patient was egress and sent home with analgesic and tetanic toxoid prescription. The posterior patient evolution was good. He did not present any later sequelae.

Animal description. The animal brought by the patient was an arachnid (Barnes, 1977) that reached 3 cm of longitude. The prosoma was divided in a high anterior caparison carrying a pair of very near eyes, located on the half previous border, and in a short later section. The abdomen was very large, and extensively articulate with the prosoma, and also highly segmented. The most striking feature was the enormous size of their quelicera proyecting ahead the prosoma. The quelicera longitude was higher than the prosoma. Dorsal (Fig.1) and ventral (Fig.2) views of adult female are showed.

DISCUSSION

The main objective of this note is not of course to describe a without importance lesion caused by a Venezuelan arachnid, but ratherly calling the

attention to our specialists about a forgotten biological group that presents interesting characteristics such as, its distribution in habitats not previously described for this order.

Most of the Solpugides are found in tropical and subtropical regions, they avoid fertile areas and for this reason they are more frequent in desertic and warm regions of the world. These animals hide under stones, caves in the floor, cracks and some species are excavators (Barnes, 1977). The studied specimen was from an urban region that originally was a tropofitic area (savanna dry forest) at the piedemont of the central part of the Costa Range, with annual pluvial precipitations of 870 mm and 26 °C annual mean temperature (Tamayo, 1983).

Nevertheless, this area has suffered of deeply environmental modifications as a consequence of the city expansion, putting in danger the existence of these endemic species.

Solpugides are known to make caves but the female usually scrapes a circle in the sand. All species appear similar in these habits. According to Cloudesley-Thompson (1961) these animals are voracious and, having kept these over a number of years, they eat mice, lizards and scorpions. The prey is located by vibration on the tactile organs and captured by ambush or stalking. Hence they have not venom glands, they are not venomous.

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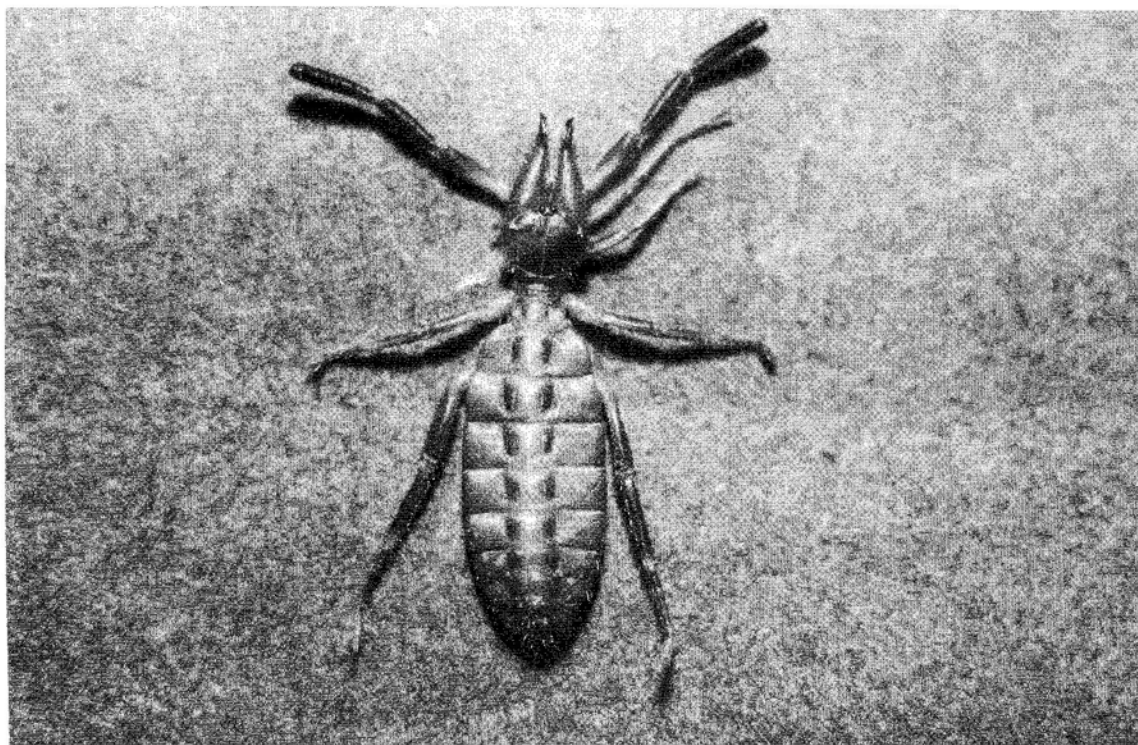


Figure 1. Dorsal view of the the adult female Solpugida specimen. The prosoma divided in anterior caparison carrying a pair of very near eyes. The longitude of quelicera was higher than the prosoma.

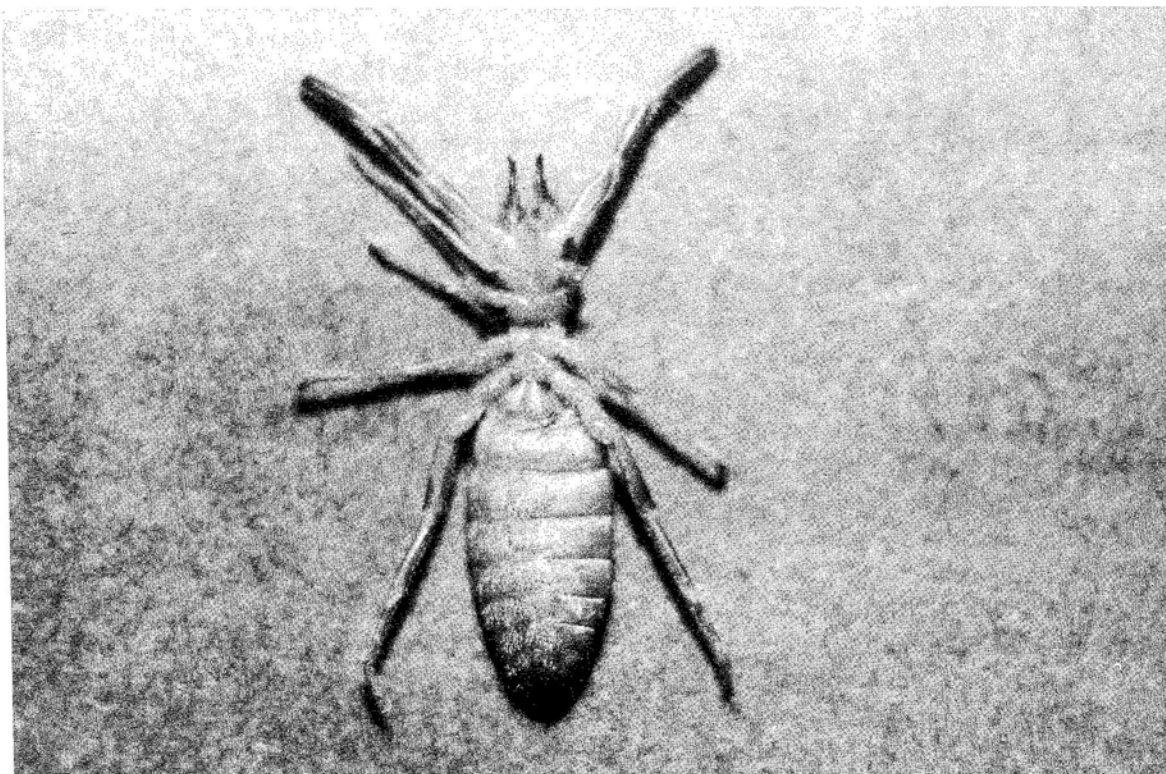


Figure 2. Ventral view of the adult female Solpugida specimen. The abdomen is large and articulate with the prosoma.