

**A CASE OF ENVENOMATION BY PEZ SAPO (*THALASSOPHRYNE* SP.)
(CHORDATA: BATRACHOIDIDAE) IN VENEZUELA**

**UN CASO DE ENVENENAMIENTO POR PEZ SAPO (*THALASSOPHRYNE* SP.)
(CHORDATA: BATRACHOIDIDAE) EN VENEZUELA**

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ABSTRACT

An envenomation accident by fish "Pez Sapo" (*Thalassophryne* sp) in a fisherman village, Playa Santa Cruz, Sucre state, Venezuela from 20 km Playa Colorada is described. A male patient was stung while was swimming. The patient referred in a first contact with the fish something dribble and subsequently almost instantaneous he felt a strong jab and intense pain in the first right toe. Immediately, after watching the fish, he left the water and he observed in the finger a 3 mm of diameter bleeding wound and a strong pain in the wounded area. An oedema extended to the whole foot in the first minutes and then ascending to the knee was present. Concomitantly, obnubilation, profuse sweating and drowsiness were noticed. Few days after, the wound slowly healed, acquiring a similar dark brown chocolate colour. Patient was treated with antihistamines and steroids.

RESUMEN

Un accidente de envenenamiento por Pez Sapo (*Thalassophryne* spp.) se describe proveniente de Playa Santa Cruz, un pueblo de pescadores en el estado Sucre, Venezuela, ubicado a 20 km de Playa Colorada en dirección hacia oriente. Este paciente masculino fue pinchado mientras estaba nadando y refirió el primer contacto con el pez, como una sensación de algo resbaloso y de una manera casi instantánea un pinchazo fuerte en el primer dedo del pie derecho. Inmediatamente salió del agua y observó en el dedo una herida sangrante de 3 mm de diámetro. La percepción del paciente fue un dolor intenso en el área de la herida, y la aparición de un edema que se extendió a todo el pie en los primeros minutos, ascendiendo posteriormente hasta la rodilla. Concomitantemente, presentó obnubilación, sudoración profusa y adormecimiento del miembro afectado. Con el curso de los días la herida sanó lentamente, adquiriendo un color achocolatado. El paciente fue tratado con antihistamínicos y esteroides.

Keywords: *Thalassophryne*, Pez Sapo, Toad fish, Caribbean sea, fish envenomation

Palabras clave: *Thalassophryne*, Pez Sapo, Mar Caribe, envenenamiento por pez.

INTRODUCTION

Very little is known about the Pez Sapo (*Thalassophryne* spp.), which is responsible each year, for a substantial number of envenomations in north coast of Venezuela (Fernandez, CT, 1999, personal communication). In Venezuela, the actual accidents and deaths by venomous fishes statistics is not known, because most of them occurs in small coastal villages where the patients are

automedicated or treated by quacks. The accidents with venomous fishes are more frequent that we can imagine and the deaths caused by them, generally, not identified and confounded with suffocate under water, occurring in our beaches. In Venezuela, an important family of venomous fishes is represented by bizarre and distasteful aspect species, as the very little popular scorpion fish (*Scorpaena plumieri*) (Halstead, 1971), whose venom, in addition to causing local symptoms pro-

duces a general symptomatology, including the death, occurring around 7 hours after the accident. Other venomous fish genera (*Thalassophryne* sp.) have representative species in Venezuela, such as the popularly called Pez Sapo (Toad fish) (Machado-Allison & Rodriguez-Acosta, 1997).

Local and systemic symptoms including severe pain in the wound and dermal oedema and necrosis localised in the stung zone are described. Moreover, headache, dizziness, nausea and vomiting are also produced by Pez Sapo envenomation (Halstead, 1971). In this work, a patient attacked in a Neotropical beach of the Caribbean Sea with several symptoms of Pez Sapo envenomation is reported.

MATERIAL AND METHODS

The Venomous Animals Department of the Tropical Medicine Institute is one of the centres where venomous fishes of medical importance are being studied. The Department maintains a database of all patients with possible envenomation from marine animals. The Meteorology Navy Centre in Caracas, supplied daily weather information.

Geographical area. Playa Santa Cruz, at 20 km from Playa Colorada, Sucre state, Venezuela was the accident location area. This region is a fisherman village where people know very well the Pez Sapo and its envenoming consequences.

RESULTS

Case report. On August 10th 1999 at 4.30 p.m. a 40 years old male patient was stung while swimming. In the accident place, the sea was 1.60 mts. deep, calm and muddy after raining. The patient referred in a first contact with the fish something dribble and subsequently almost instantaneous he felt a strong jab and intense pain in the first right toe. Immediately he left the water observing in the finger a bleeding wound of 3 mm of diameter. In the course of the followings 15 minutes, after the accident, he began to feel a strong pain in the wounded area; appearance of an oedema that extended to the whole foot in the first minutes and then it ascended until the knee, accompanied by paresthesia at the same anatomical regions. Concomitantly, the patient

displayed general dissipation, profuse sweating, nausea and drowsiness.

A physician, 15 minutes after accident, administered 15 mg oral chlorpheniramine and 100 mg intravenously hydrocortisone. Four days later, the wound slowly healed, acquiring a dark brown chocolate colour. Two weeks after the accident the pain persisted and a surgical cleaning was carried out. Later on, the wound healed well, but a piercing pain when the patient walks is still perceived. The patient who is a biologist identified the Pez Sapo.

DISCUSSION

In spite that Pez Sapo accident is not rare in our Country, as far as we known, this is the first description of *Thalassophryne* envenomation reported in Venezuela.

World-wide large numbers of deaths from marine animals occur. Both awareness of the problem and knowledge of the distribution of these animals are important for the coastal population. Scorpaenids and Batrachoididae Caribbean fishes can inflict the toxic sting with its spines. They inhabit sandy and muddy bays, burying themselves in the soft sand with only their heads exposed, at irregular intervals darting out to capture their prey. The first three thorns of the dorsal fin and a proteolytic and neurotoxic glandular epithelium secretion constitute the *Thalassophryne* venomous apparatus (Machado-Allison and Rodriguez-Acosta, 1998). In reported experiments, guinea pigs when were venom injected developed necrosis in the injection site, paralyzes, ascites, convulsions and death (Froes, 1933).

In humans, after the sting, agonising pain is felt. The stung wound bleeds, the outer area swells and becomes intense red. Sometimes around the wound a necrosis appears. General symptoms such as exhaustion, fever, dizziness, nausea, bradypnea and shock can evolve.

For treatment, stung area should be immediately washed and the thorn, if still in the wound, must be removed. Patient was only treated with

antihistamines and steroids. We recommend the use of infiltration with procaine that brings an immediate relief. Since procaine immediately acts, and before its action ceases, the other drugs activity such as steroids begins. Regarding that the venom is thermally weak, the stung area should be submerged in hot water (40°C) for 30 to 90 minutes.

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