

Insect Bite in the Cornea, about a Case

Armas Herrera Gioconda Lourdes* and Arévalo Arévalo Luis Felipe

La Selva Ophthalmological Clinic, Tarapoto, Peru

*Corresponding Author: Armas Herrera Gioconda Lourdes, La Selva Ophthalmological Clinic, Tarapoto, Peru.

Received: July 24, 2022; Published: August 29, 2022

Abstract

Introduction: It is vitally important to consider that the wasp venom toxin can cause a violent reaction in order to damage the visual function, which is why we present the following related.

Clinic Case: 32-year-old female with a history of wasp sting 24 hours ago in the right eye; decreased visual acuity, redness, tearing, pain, discharge; finger counting visual acuity at 2 meters from the right eye and 20/25 left eye with intraocular pressures of 12 and 13; biomicroscopy conjunctival hyperemia with periciliary injection 3+, foreign body in the cornea up to the stoma with edema 3+, Descemet's striae in the right eye.

Results: The foreign body is removed with prior antimicrobial protection with the antibiotic tobramycin, steroidal anti-inflammatory prednisolone, hypertonics and mixed lubricant carboxymethylcellulose and glycerin. A week later, the formation of an anterior capsular opacity is observed with signs of iridian atrophy that begins to give a "change in color of the iris", at two weeks the dilation of the periciliary vasculature is evident at 4 hours and at 3 weeks the patient presents a visual acuity of 20/25 in both eyes, with corneal transparency, persistence of iridian atrophy and anterior capsular traumatic cataract, with remission of symptoms in the patient.

Conclusion: The exact component of the venom that produces the signs previously described is not known, there are theories that it may be due to a component with parasympathomimetic action, the same one that is related to other clinical observations of local depigmentation and heterochromia.

Keywords: Sting; Cornea; Atrophy; Iris; Wasp

Introduction

Wasp stings are common in the rural area of our region (Peruvian jungle), especially in tropical areas where the population has permanent contact with this type of insect and therefore suffers from a constant source of stings in various parts of the body. Being little described the sting in the eye, being more exact at the corneal level. It is of vital importance to consider that the toxin of the wasp venom can cause a violent reaction in order to damage the visual function, which is why we present the following related case.

Clinical Case Description

We present the case of a 32-year-old female patient who reported a history of wasp stings in the right eye 24 hours ago, presenting decreased visual acuity, redness, tearing, pain, discharge at the time of consultation. At the time of the consultation, he presented

visual acuity of counting fingers at 2 meters from the right eye and 20/25 left eye with intraocular pressures of 12 and 13 respectively. Biomicroscopy revealed conjunctival hyperemia with periciliary injection 3+ and the presence of a foreign body in the cornea that reached the stroma with edema 3+, Descemet's striae in the right eye.

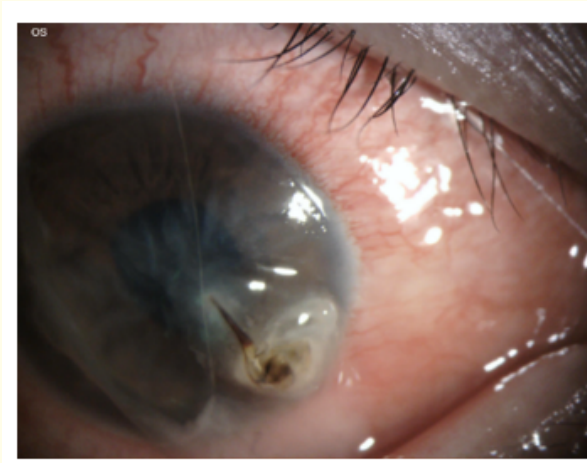


Image 1: Edematous cornea with presence of foreign body.

Results

The foreign body was removed with prior antimicrobial protection with the antibiotic tobramycin, the steroidal anti-inflammatory drug prednisolone, hypertonic drops, and a mixed carboxymethylcellulose and glycerin lubricant. After a week, the formation of an anterior capsular opacity with signs of iridian atrophy is observed, which begins to give an appearance of "iris color change", after two weeks, dilation of the periciliary vasculature is evident at 4 hours in the form and at 4 weeks the patient presented a visual acuity of 20/25 in both eyes, with corneal transparency, persistence of iridian atrophy and anterior capsular traumatic cataract, with remission of symptoms in the patient.

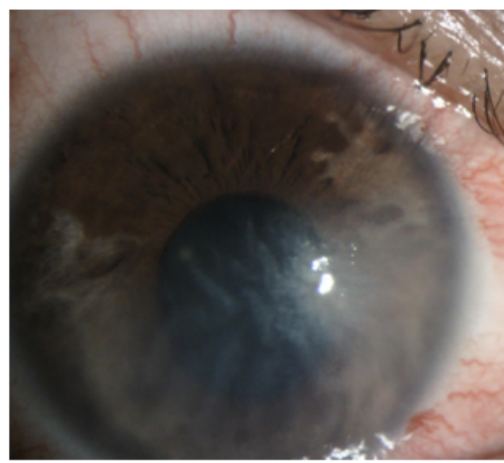


Image 2: Cornea with increased edema and striae in the descemet.

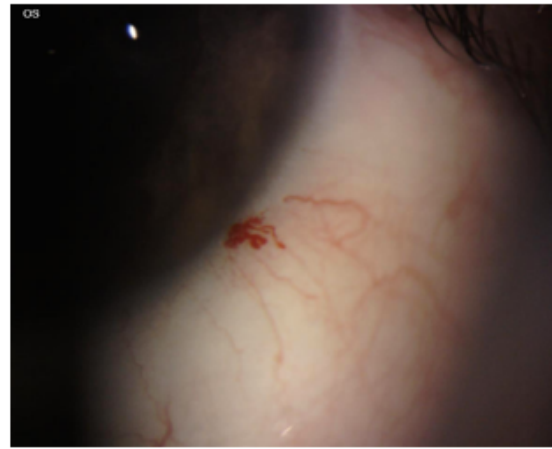


Image 3: Perilimbar vascular dilation hours 4.

Discussion

We found a previous publication by Arenas [1] which reproduced the effect of wasp stings in rabbits, finding the same signs as in our patient, in whom, after the sting, a circumscribed edema was present that extended from the inoculation area. 4 to 5 mm with 48% persistence of the edema at one week, 16% at two weeks and 14% at 3 weeks, the same as in the histopathological study, this edema is related to endothelial-epithelial dystrophy; likewise the finding of the persistence of the sting as an inoculation vehicle. He also describes depigmentation 24 hours after inoculation of the poison reaching its maximum a week, the same that gave the impression of “bluish” eyes, the same that he describes histopathologically as an iridian depigmentation of the posterior face.

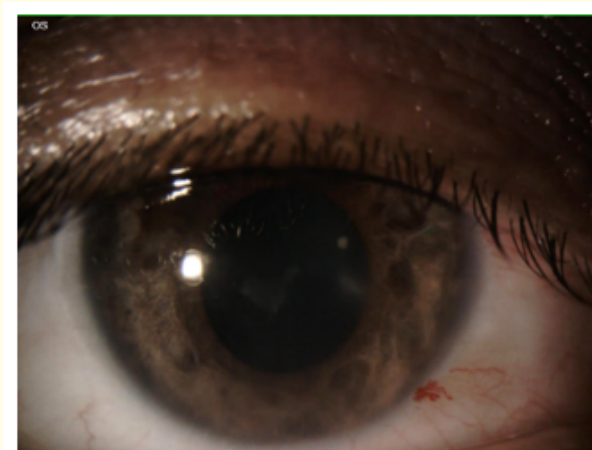


Image 4: Iridia atrophy at week 2.

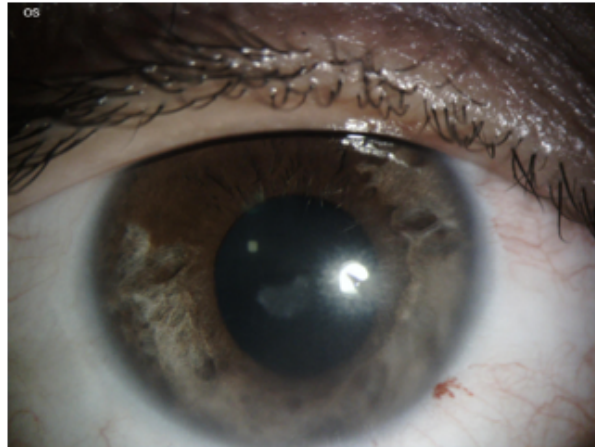


Image 5: Iris atrophy at week 4.

Conclusion

The exact component of the venom that produces the signs previously described is not yet known, there are theories that it may be due to a component with parasympathomimetic action, the same that is related to other clinical observations of local depigmentation and heterochromia, likewise not all classes of wasp cause these ocular changes, so it would be the subject of a more in-depth investigation a posteriori.

Bibliography

1. Arenas E. "Despigmentación Ocular por picadura de Avispa". *Palestra Oftalmológica Panamericana* 1.2 (1977): 69-76.

Volume 7 Issue 9 September 2022

**©All rights reserved by Armas Herrera Gioconda Lourdes
and Arévalo Arévalo Luis Felipe.**