



# Acanthamoeba Keratitis in Contact Lens Wearer

Dr. Marta Villalba<sup>1\*</sup>, Antonio Cano Ortiz<sup>1</sup>, Álvaro Sánchez Ventosa<sup>1</sup>, David Cerdán Palacios<sup>2</sup>

<sup>1</sup>Department of Ophthalmology, Anterior Segment and Cornea Unity, Hospital Arruzafa, 14012 Cordoba, Spain

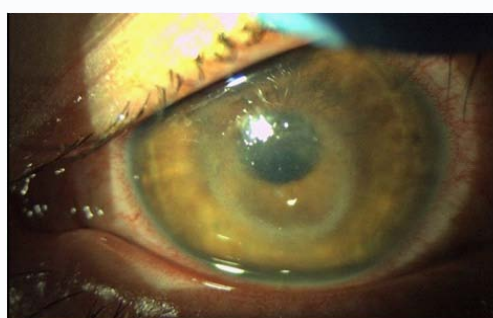
<sup>2</sup>Department of Ophthalmology, R&D Unity, Hospital Arruzafa, 14012 Cordoba, Spain



## Clinical Image

A 14-years-old man, contact lens carrier, initially presented to the emergency room with a corneal ulcer and recurrent inflammation in his left eye. He was initially treated with antibiotics, later adding topical and systemic antivirals when it was mistakenly considered, like herpetic keratitis. After fifteen days, he had intense photophobia and loss of vision. On ophthalmological examination superior perineuritis, annular infiltrate with epithelial defect, superficial punctate keratitis and complete stromal edema were observed and captured in this image. A diagnosis [1] of Acanthamoeba keratitis was made (Figure 1).

Acanthamoeba keratitis is an inflammatory pathology of the cornea, caused by Acanthamoeba [2], a protozoan found in floor, on ground, and in water, at sea and in homes and swimming pools. The characteristic symptoms of this infection are: red eye, decreased vision, intolerance to light, tearing, and above all, eye pain. This pathology is predominantly seen in daily wear of contact lenses [3].



**Figure 1:** Cornea with intact epithelium and ring infiltrate, characteristic of Acanthamoeba keratitis, in a contact lens wearer.

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### \*Correspondence:

Dr. Marta Villalba, MD., Department of Ophthalmology, Anterior Segment and Cornea Unity, Hospital Arruzafa, 14012 Cordoba, Tel: 0034 957340118, Spain, E-mail: marta.villalba7@gmail.com

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## Declaration of Conflicting Interests

The Authors declare(s) that there is no conflict of interest.

## References

1. Szentmáry N, Daas L, Shi L, Laurik KL, Lepper S, Milioti G, Seitz B. Acanthamoeba keratitis - Clinical signs, differential diagnosis and treatment. J Curr Ophthalmol. 2018 Oct 19;31(1):16-23. doi: 10.1016/j.joco.2018.09.008. PMID: 30899841; PMCID: PMC6407156.
2. Niederkorn JY. The biology of Acanthamoeba keratitis. Exp Eye Res. 2021 Jan;202:108365. doi: 10.1016/j.exer.2020.108365. Epub 2020 Nov 19. PMID: 33221372; PMCID: PMC7856181.
3. Carnt N, Stapleton F. Strategies for the prevention of contact lens-related Acanthamoeba keratitis: a review. Ophthalmic Physiol Opt. 2016 Mar;36(2):77-92. doi: 10.1111/opo.12271. Epub 2015 Dec 21. PMID: 26691018.