Interstellar Bartonella

Bartonela interestelar

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A previously healthy male patient, aged 41, presented to the emergency department with complaints of a gradual decline in visual acuity in his right eye (RE) over the course of one month, without any allergies or recent travel. He mentioned a history of close contact with cats.

During the physical examination, his best corrected visual acuity (BCVA) in the right eye (RE) was counting fingers, while in the left eye (LE) it was 20/20. Biomicroscopy showed no significant changes. Fundoscopy in the RE revealed a focus of parafoveal retinitis surrounded by a star of hard exudates centered on the fovea (as shown in Fig. 1). No significant changes were observed in the LE.

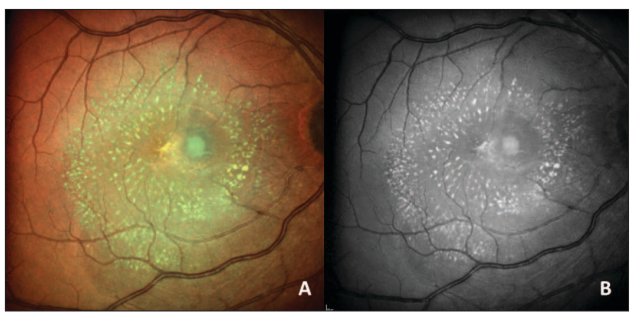

Figure 1. Multicolor of the fundus (A) showing a prominent macular star and fundus autofluorescence (B) revealing the star-shaped hypoautofluorescent lesions.

Regarding the analytical study, results were as follows: cytomegalovirus and Borrelia (negative IgM and IgG), negative for syphilis, toxoplasmosis (negative IgM and positive IgG), and Bartonella hanselae (negative IgM and positive IgG). Therapy was initiated with doxycycline 100 mg (twice a day, for 21 days) and prednisolone 1 mg/kg/day (in a tapering schedule every 5 days), resulting in an improvement in BCVA to 20/20.

The cat is the main reservoir of the Gram-negative bacteria Bartonella henselae. Humans acquire the bacteria through scratches or bites from cats. Once infected, Bartonella can colonize the erythrocytes, and the response to this infection will depend on the host's immune system.

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MJF and NF: Review and editing, supervision.
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JL: Redação, pesquisa bibliográfica e revisão.
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REFERENCES

1. Mabra D, Yeh S, Shantha JG. Ocular manifestations of bartonellosis. Curr Opin Ophthalmol. 2018;29:582-7. doi: 10.1097/ICU.0000000000000522.
2. Curi AL, Machado D, Heringer G, Campos WR, Lamas C, Rozental T,et al. Cat-scratch disease: ocular manifestations and visual outcome. Int Ophthalmol. 2010;30:553-8. doi: 10.1007/s10792-010-9389-5.
3. Amer R, Tugal-Tutkun I. Ophthalmic manifestations of bartonella infection. Curr Opin Ophthalmol. 2017;28:607-12. doi: 10.1097/ICU.0000000000000419.

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