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Cytomegalovirus Retinitis in an Immunocompetent Patient

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Abstract **Case Report**

We report the case of a young immunocompetent patient with cytomegalovirus retinitis, received in the ophthalmological emergency room with a unilateral decrease in visual acuity due to macular localization. The clinico-tomographic follow-up was particularly satisfactory after 3 weeks on Ganciclovir with complete recovery of visual acuity after 2 months of treatment (interesting iconographic illustration).

Keywords: Cytomegalovirus retinitis, angiography, OCT, Ganciclovir.

OBSERVATION

We report the case of a 25 year old patient without any particular medical history, presenting at the ophthalmologic emergency unit with a unilateral decrease in visual acuity of the right eye since 5 days before admission.

The ophthalmological examination upon admission noted:

Visual Acuity (RE: 2/10; LE: 10/10), the examination of the anterior segment was normal in both eyes; the examination of the posterior segment noted 2 white chorioretinal lesions with perilesional haemorrhage in the right eye; the macular reflection decreased; the papilla normal; and a chorioretinal lesion next to the STA (Superior Temporal Arcade) with a perilesional haemorrhage in the left eye (Fig 1).

Tests undergone

- Fluorescein angiography

Fluorescein diffusion images of the active chorioretinal lesions increasing in intensity with respect to the different angiographic times (Fig 2).

- Macular OCT

Showing the tomographic evolution of the macular edema in the right eye and the lesion regression with treatment (Fig 3, 4 & 5).

- Retroviral (HIV) serology was negative
- Inflammatory marker tests (CBC, ESR, CRP) were negative
- Toxoplasmosis, CMV and syphilis serologies were requested (the results took 4 days)

At this stage, we suspected ocular toxoplasmosis looking at the clinical and epidemiological context and the patient was put under cotrimoxazole. General corticotheraphy was initiated 48 hours after the antibiotic treatment. The evolution was marked by a decrease in visual acuity of the right eye (RE: FCT; Finger Count Test), left eye acuity was conserved and the lesions remained stationary.

The CMV (Cytomegalovirus) serology results came back positive (IgG+ and IgM+) and the other serology tests were negative.

The patient was put under antiviral treatment in the form of intravenous Ganciclovir at 10mg/kg/day twice a day for 21 days, the corticotherapy per os was maintained with adjuvant treatment.

The evolution was favorable with a clinicotomographical improvement after 1 month of treatment: Visual Acuity (RE:8/10; LE:10/10) (Fig 4) and at 2 months of treatment, complete cleaning of lesions with visual acuity 10/10 (RE and LE) (Fig 5).

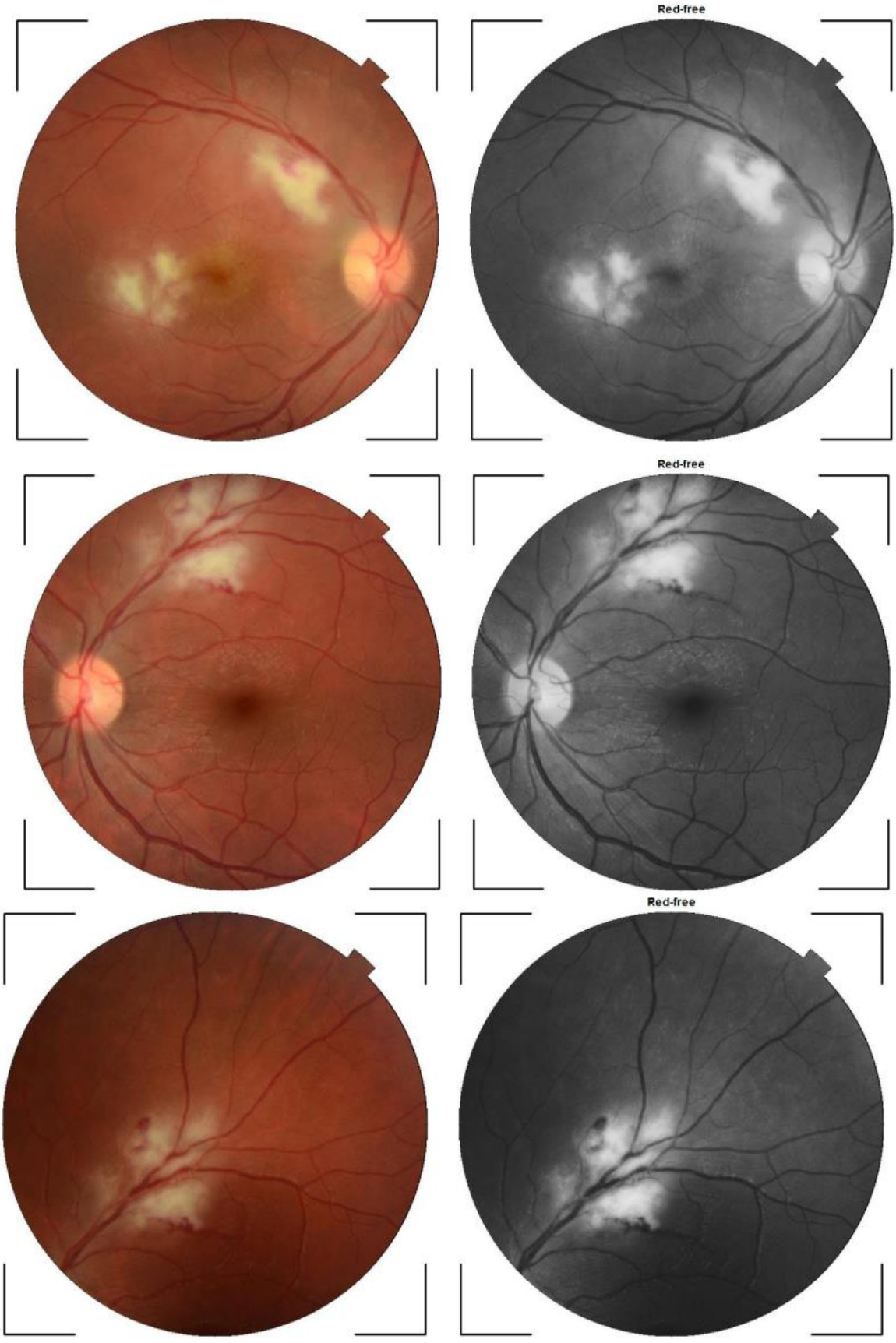

Figure 1: Retinal lesions with perilesional haemorrhage in both eyes

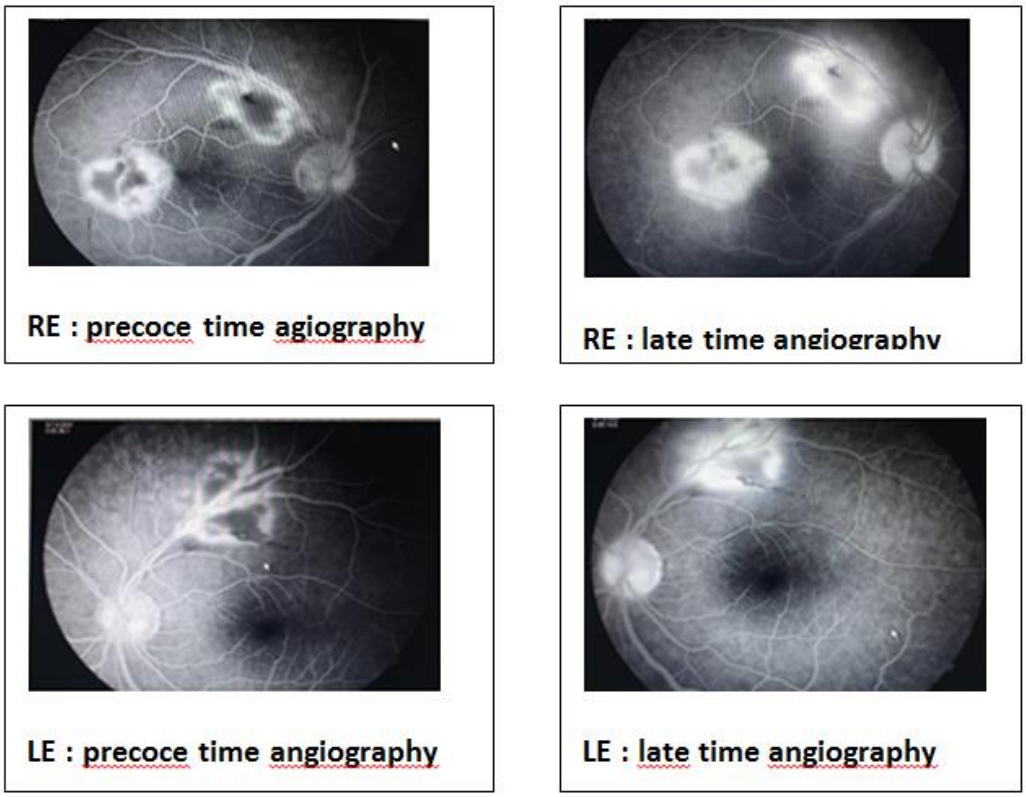

Figure 2: Fluorescein angiography diffusion images of active chorioretinal lesions increasing in intensity with respect to different angiography times

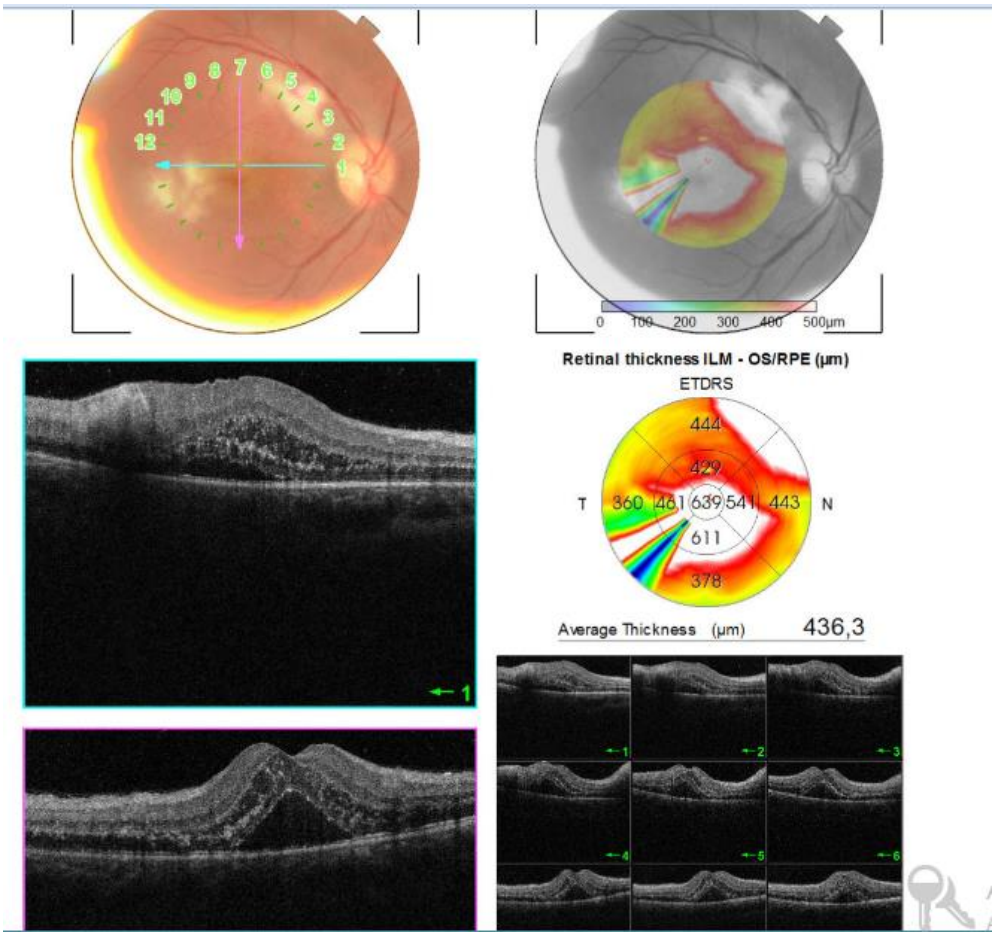

Figure 3(A): Tomographic images before treatment showing the presence of a major macular edema in the right eye with central macular thickness being 639µm, the macular profile was normal in the left eye

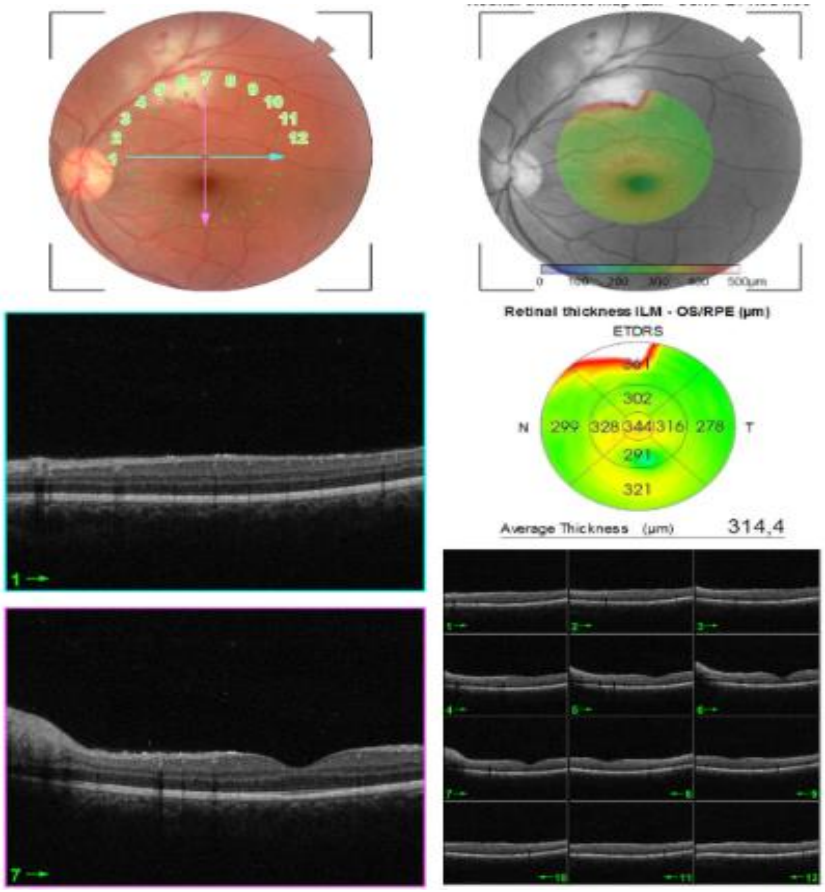

Figure 3(B): Tomographic images before treatment showing the presence of a major macular edema in the right eye with central macular thickness being 639µm, the macular profile was normal in the left eye

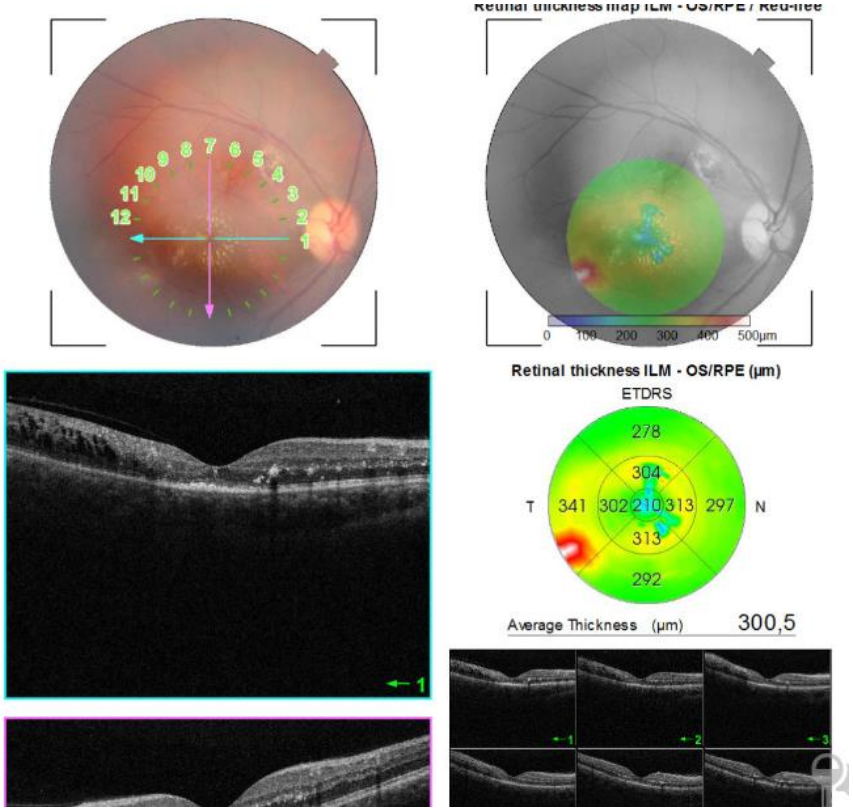

Figure 4: OCT images of the right eye after 3 weeks of treatment showing a decrease in the macular edema of the right eye with improvement in central macular thickness of 210µm

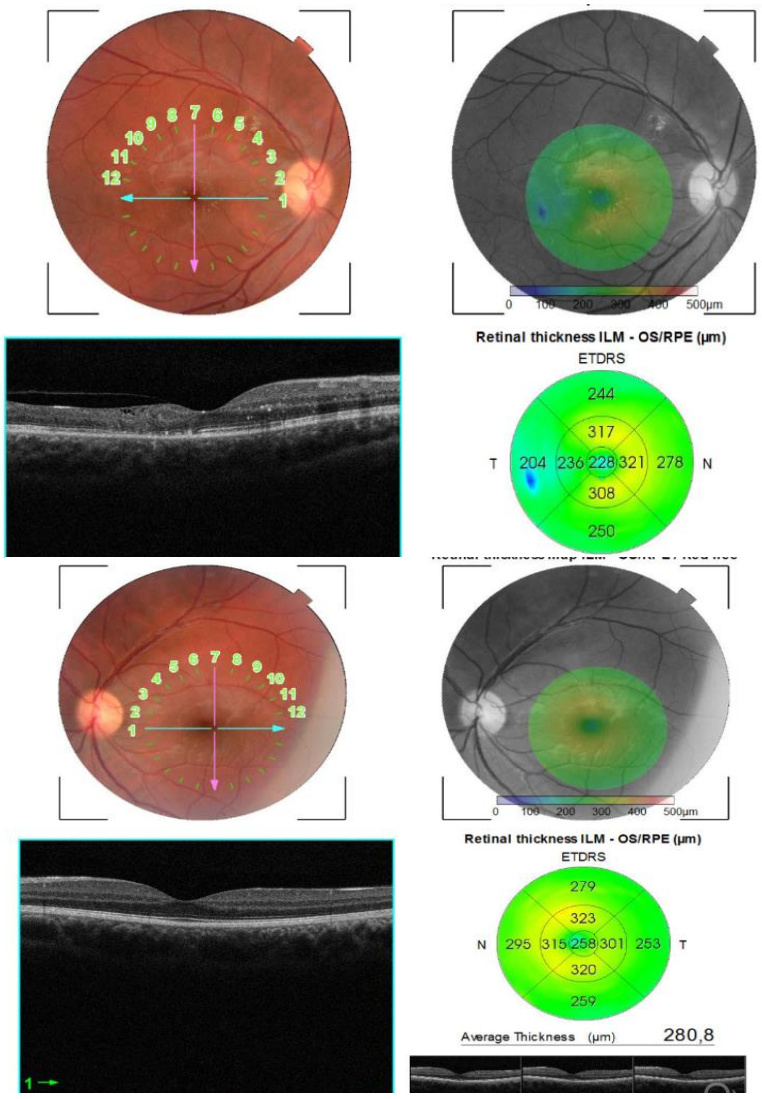

Figure 5: OCT images after 2 months showing resolution of lesions in both eyes with a regression of the macular edema in the right eye

DISCUSSION

Retinitis due to CMV is generally an infection of immunodepressed individuals (mostly HIV patients, diabetic patients or patients under immunosuppressive treatment…); affection of an immunocompetent individuals is a rare but possible situation [1].

Retinal affection manifests in the form of necroticohaemorrhagic lesions (localised or diffused) with vascular distribution [1].

The differential diagnosis can be made with toxoplasmosis which in principle, is not accompanied by retinal haemorrhage. The intravenous treatment has the advantage of limiting the systemic dissemination and bilateralisation the the lesion or it's extension [2].

The choice of treatment with intravenous Ganciclovir after the phase in our context was due to the unavailability of an oral therapeutic alternative.

CONCLUSION

Retinitis due to cytomegalovirus is rare affection in the immunocompetent individual, a potential necrotising affection. Early handling modifies the prognosis.

Conflict of interest: The authors declare not having a conflict of interest

REFERENCE

1. Rémond, A. L., Le Hoang, P., & Bodaghi, B. (2017). Rétinites virales de l'immunocompétent; Elsevier Masson SAS.
2. Vaudaux, J. D., & Guex-Crosier, Y. 2016). Atteintes oculaires au cours de l'infection à

virus de l'immunodéficience humaine; Elsevier Masson SAS.