

# Central Serous Chorioretinopathy Treated With Micropulse A SATISFACTORY RESULT

Leonardo D. Magri, MD<sup>1</sup>; Luis Felipe C. Ogliari, MD<sup>1</sup>; Mateus P. Arruda, MD<sup>1</sup>; Heitor S. Nogueira, MD<sup>1</sup>; Arthur T. F. Borges, MD<sup>1</sup>, Natália V. De Moraes, MD1; Marcio A. N. Costa, PhD<sup>1</sup>; Fernanda N. Federici MD<sup>1</sup>.

<sup>1</sup> Department of Retina, Penido Burnier Institute, Campinas-SP, Brazil.





#### **PURPOSE:**

To describe a case of male patient who presented central serous chorioretinopathy in the right eye undergoing long-term treatment with aldactone without improvement, after undergoing micropulse laser, a significant improvement was observed in the condition.

### **METHODS:**

Case report with multimodal examination.

## **RESULTS:**

A 34-year-old male patiente, caucasian, married, businessman reports a condition already diagnosed and undergoing treatment for central serous chorioretinopathy with worsening visual acuity in the right eye for 2 weeks.

He denied medical history.

Using aldactone for 11 months.

#### **VISUAL ACUITY:**

OD: +6,00 (20/50)

OS: +4,50 (20/25)

#### **BIOMICROSCOPY:**

Clear conjunctiva, transparent cornea, phakic, trofic iris, anterior chamber formed, no anterior chamber reaction in both eyes.

#### **FUNDUS PHOTO:**

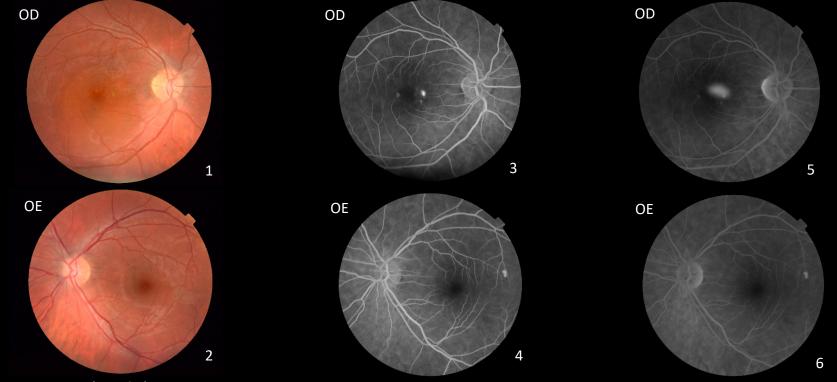
Images.

#### **FLUORESCEIN ANGIOGRAPHY:**

Images.

#### **OPTICAL COHERENCE TOMOGRAPHY (OCT):**

Images.



#### RETINOGRAPHY (1 and 2):

OD: Stained optic disc, physiological excavation, change in macular brightness with apparent elevation in the foveal region, vessels with normal anatomy and caliber, retina applied 360°. (image 1).

OS: Stained optic disc, physiological excavation, macula with physiological shine, vessels with normal anatomy and caliber, retina applied 360°. (image 2).

#### FLUORESCEIN ANGIOGRAPHY (3, 4, 5 and 6):

OD: Presence of early pinpoint hyperfluorescence expanding forming the "chimney smoke" pattern. (image 3 and 5).

OS: Presence of a hyperreflective point in the region temporal to the macula without increasing in size during the examination. (image 4 and 6).





## **OPTICAL COHERENCE TOMOGRAPHY (OCT):**

OD: Accumulation of fluid in the subretinal space.

OE: Presence of pigment epithelial detachment.

#### **LABORATORY EXAMS:**

Negative for infectious sorology tests.

#### CONDUCT:

1 micropulse laser session and evaluation after.



Examination 6 months after micropulse laser application in the right eye.

Patient reports 20/30 vision.

Patient in follow-up.

#### **DISCUSSION AND CONCLUSION:**

Central serous chorioretinopathy (CSC) is a disease characterized by detachment of the neurosensory retina as a result of the accumulation of serous fluid between the neurosensory retina and the retinal pigment epithelium (RPE) originating from the choriocapillaris through an RPE defect. CSC frequently affects middle-aged men and receives the terminology "central" due to the fact that the lesion is most commonly located in the macular area.

The pathophysiology is not well understood, dysregulation of the choriocapillaris microcirculation possibly occurs, leading to fluid leakage into the space just below the RPE, damaging and reducing the activity of these cells. Normally, spontaneous absorption of the liquid occurs. However, if microvascular dysregulation persists, the process will be perpetuated, resulting in recurrences.

In cases where the subretinal fluid does not exhibit spontaneous absorption additional treatments must be used. In this particular case, the patient was already being treated with aldactone, a treatment used systemically with the aim of reducing serous detachment, but without results. Micropulse laser was then proposed to the patient due to recent studies.

The effect of micropulsed laser therapy with diode or yellow laser was evaluated to minimize retinal morphofunctional changes. A randomized clinical trial compared this therapeutic modality with the argon laser photocoagulation technique and observed complete resolution of subretinal fluid in all the treated groups after 12 weeks of follow-up.

Therefore, monitoring a patient diagnosed with CSC is essential because depending on how the patient progresses, more specific treatment will be necessary.

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