

# SEVERE SICKLE CELL RETINOPATHY TREATED WITH ARGON LASER PHOTOCOAGULATION



YAMAUCHI, RH<sub>4</sub>; OLIVEIRA, FT<sup>1</sup>; YAMAUCHI,R³; NEVES ASF²; LUJAN SA<sub>6</sub>; LUCATI L<sub>7</sub>; TAVARES V<sub>8</sub>; OGASAWARA MM<sub>5</sub>

<sup>1</sup> Fellow in Retina and Vítreo, Hospital CEMA-SP <sup>2</sup> Specialist in Retina and Vítreo, Hospital CEMA-SP <sup>3</sup> Resident in Ophthalmology, Hospital CEMA-SP

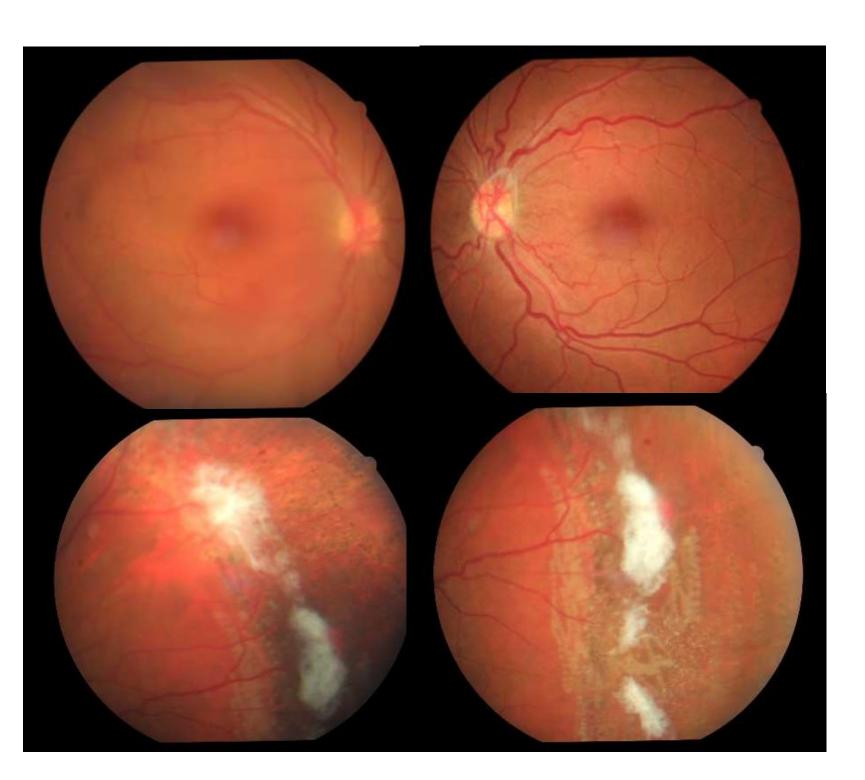


#### PURPOSE

Describe a case of severe proliferative sickle cell retinopathy with low visual acuity, which evolved with a favorable response after therapeutic intervention with argon laser photocoagulation.

## METHODS

Information was obtained through review of medical records, multimodal imaging of the retina and literature review



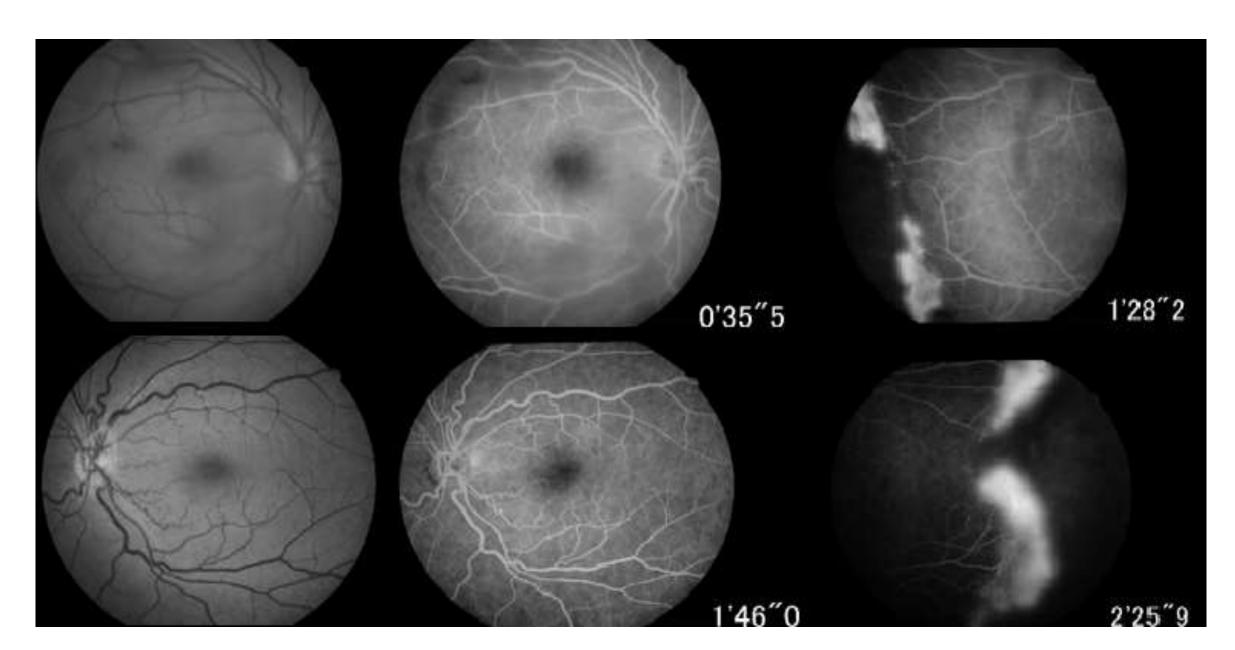
#### RESULTS

S.M., male, 42 age, with low acuity and blurring vision, today, in the right eye. Visual acuity 0.4 OR; 0.8 OS. IOP 14 OR;12 OS. Normal biomicroscopy.

OR fundoscopy: vitreous hemorrhage 1+/4+, tortuous vessels with some vessel crossings, applied retina with white lesions (fibrovascular proliferation in upper and lower temporal periphery). OS: similar peripheral changes, presence of adhered vitreous and thickening of the peripapillary posterior hyaloid.

OD angiography with fluorescein: areas of hypofluorescence due hypoperfusion in the periphery. In both eyes: hyperfluorescence due to leakage in the periphery.

Follow up: he underwent 5 photocoagulation sessions, and after 26 months, he has no more episodes of vitreous hemorrhage.



## DISCUSSION

Sickle cell anemia is considered by the WHO most common hemoglobinopathy in the world. There is a mutation of the globin gene chromosome 11, forming a hemoglobin S. The presence of hemoglobin S can cause occlusive vascular phenomena The hemolysis. important most ophthalmological alterations related to sickle cell anemia occur mainly due to the obstruction of the retinal vessels.



