

(X) R1 ( ) R2 ( ) R3 ( ) PG0 ( ) PG1 ( ) Estagiário ( ) Tecnólogo ( )  
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Service (sector) Retina and Vitreous N° CEP

**Optical coherence tomography of a traumatic Nd:YAG laser macular hole** Authors: Ferreira HM; Hagemann LF; Costa RA; Farah ME. Purpose: To describe clinical and optical coherence tomography (OCT) evolution of a macular hole caused by occupational Nd:YAG laser injury. Methods: Case report. A 34-year-old electronics technician with accidental Nd:YAG laser injury in his right eye. OCT, fundus photographs, fluorescein and indocyanine green angiography and Amsler grid testing were performed 20 days and repeated one year later after injury.: Results: Nd:YAG Laser was responsible for a macular hole with an 850 mm diameter. After 20 days of the injury, visual acuity was 20/200. Amsler grid testing displayed a central scotoma with surrounding distortion and extension in the superior temporal field, and OCT showed a defect in all retinal layers at the macula center with rectified and perpendicularly orientated borders to the retinal pigmented epithelium(RPE) One year later, hole dimensions increased to 1120 mm, visual acuity was 20/400, and OCT still disclosed the same characteristics of the borders but were slightly less evident than in the first exam. Conclusion: Despite being a rare event, accidental Nd:YAG laser lesion can cause profound damage and can be easily avoided if the correct safety procedures are used.