

# Case Study: Multifocal Central Serous Retinopathy

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Some of the greatest discoveries  
are farther than the eye can see.



## History

A 49 year-old Caucasian male presented with a recent decrease in vision. For the past 12 years, he had a history of chronic central serous retinopathy and his vision had always recovered after each recurrence. At this visit, his visual acuity was 20/80 in the right eye and 20/40 in the left eye. The patient had no other systemic diagnosis.

## Examination

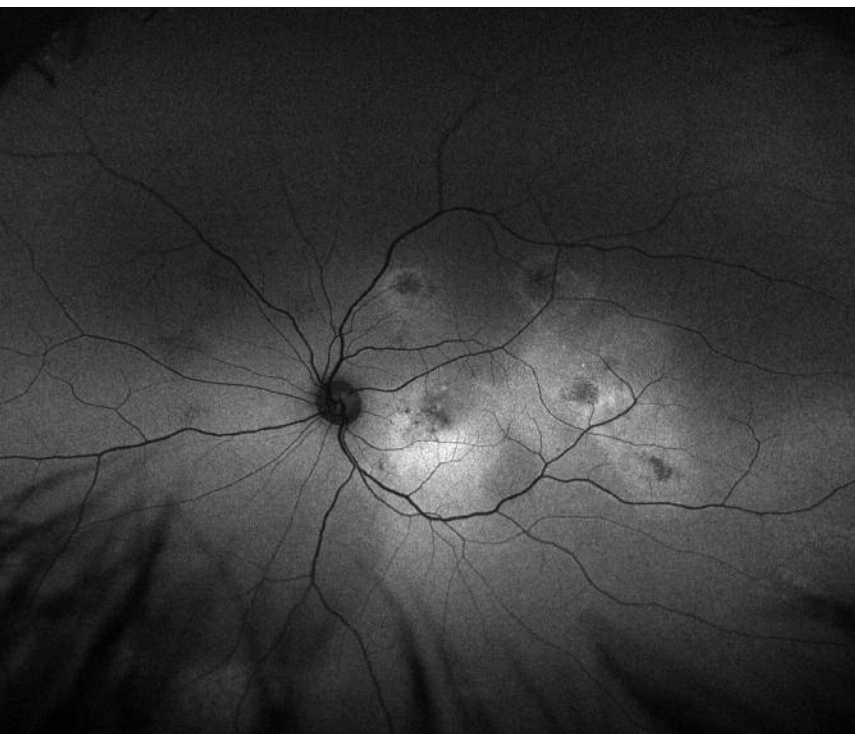
optomap® af images were obtained and showed multifocal areas of hyper- and hypofluorescence reaching into the mid-periphery. The 'gutter-like' appearances of the broad hyperfluorescent areas are characteristic of chronic central serous retinopathy. Additionally, FD-OCT images were acquired and showed massive fibrinous exudates in the subretinal space. The patient underwent a fluorescein angiogram after optomap® af images were acquired, which confirmed the diagnosis of CSR.

## Discussion

Multimodal imaging was required to determine the diagnosis of CSR. The mottled appearance of the focal lesions and the broad hyperfluorescent streaks on the optomap® af images are indicative of chronic central serous retinopathy as well as the "smoke-stack" leakage in the late fluorescein angiogram images. The benefit of the widefield optomap images is it can help identify patterns which are not discernible when focusing on a small retinal area only. CSR is a good example of this, particularly in Multifocal CSR. The work-up for hypercortisolism was negative and the patient was otherwise healthy, he was observed without treatment.

## Conclusion

optomap® af images demonstrate a classic case of CSR findings. Areas of hyper- and hypofluorescence in the mid-periphery reveal the need for widefield autofluorescence imaging in CSR cases.



optomap® af showing areas of hyper- and hypofluorescence reaching to the mid periphery



optomap® af of the right eye

