

Fundus Autofluorescence in Central Serous Chorioretinopathy

Seung-Young Yu, MD, PhD (Seoul, Korea), Sang-Woong Moon, MD (Seoul, Korea), Won Ki Lee, MD, PhD (Seoul, Korea), Hyung-Woo Kwak, MD, PhD (Seoul, Korea)

PURPOSE

To describe the fundus autofluorescence (FAF) patterns in patients with central serous chorioretinopathy (CSC) and compare them with the findings of optical coherent tomography (OCT), fluorescein angiography (FA), and indocyanine green angiography (ICG).

METHODS

The FAF images were recorded in 23 eyes of 21 patients using confocal scanning laser ophthalmoscope (cSLO). To enhance the AF signal, a mean of 10 to 12 single images was obtained after automated alignment. The FAF images were compared with OCT, FA and ICG findings.

RESULTS

Abnormal FAF in 23 eyes was classified into five patterns: mild diffuse decrease or minimal change (13 eyes), focal reticular increase (6 eyes), patchy (3 eyes), focal decrease (2 eyes) and RPE tract (2 eyes). In 13 eyes which showed mild decrease or minimal change of FAF, focal point leakage on FA and neurosensory retinal detachment on OCT were observed. The duration of decreased vision was less than 1 month. Six eyes with focal reticular increased FAF showed pigment epithelial detachment (PED) on OCT corresponding areas with increased FAF and hyperfluorescent area on FA. These patients were afflicted with CSC for more than 3 months or were at recurrent episode.

CONCLUSION

Different patterns of abnormal FAF in CSC can be identified with cSLO FAF imaging. These patterns may reflect the activity and progression of disease. FAF imaging may be helpful in documenting disease progression and understanding the pathophysiology of CSC.