

## **Hyperreflective vs hyporeflective lesions in en face swept-source optical coherence tomography images, in neovascular age-related macular degeneration**

Ignacio Flores-Moreno MD, PhD. Luis Arias-Barquet MD, PhD.  
Marcos J. Rubio-Caso MD. Marina Sastre-Ibáñez MD.  
Gabriel Arcos-Villegas MD. Noel Padrón MD, PhD.  
José María Ruiz-Moreno MD, PhD. Josep María Caminal MD, PhD.

Clínico San Carlos University Hospital, Madrid (Spain). Bellvitge University Hospital, Barcelona (Spain). Puerta de Hierro University Hospital, Madrid (Spain).

### **Purpose**

To compare hyperreflective and hyporeflective lesions in en face swept-source (SS-OCT) images in the retinal pigment epithelium (RPE) and choroid in neovascular age-related macular degeneration (AMD).

### **Methods**

Thirty-eight eyes with the recent diagnosis of neovascular AMD were imaged using a SS-OCT system. En face images were obtained at RPE, choriocapillaris, Sattler's layer and Haller's layer level. Analysis of the images and correlation with color fundus photographs, FA, ICGA in selected cases, were made.

### **Results**

En face images at RPE level revealed changes in all eyes. The neovascular complex appeared hyperreflective in 9 of 38 (23.7%) and in 29 of 38 (76.3%) it was hyporeflective. The choriocapillaris en face image showed pathologic changes in all eyes as well and in 20 out of 38 eyes (52.6%) the alterations were hyperreflective, while 18 of 38 eyes (47.4%) showed hyporeflective changes. Twenty (52.6%) eyes and nineteen (50.0%) had a hyperreflective lesion in Sattler and Haller's layer, respectively, and 15 (39.4%) cases showed a hyporeflective lesion in both layers. Hyporeflective changes were predominant at RPE level and hyperreflective at choriocapillaris, Sattler and Haller's layer.

### **Conclusions**

En face SS-OCT is a rapid, non-invasive, high-resolution technology, which allows a complementary study to angiography of neovascular AMD. Hyporeflective changes are predominant at RPE level and hyperreflective at choriocapillaris, Sattler and Haller's layer.

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