SS OCT in vitreoretinal interface disorders in high myopia

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High myopia is characterized by a refractive error higher than -6 diopters and an axial length longer than 26 mm. These patients typically exhibit a thin choroid and different vitreoretinal interface disorders caused by anteroposterior and tangential forces exerted by the vitreous on the retinal surface. In addition, a posterior staphyloma is commonly present making more difficult the acquisition of good B-scans with spectral-domain optical coherence tomography (SD-OCT). Currently, with the advent of swept-source (SS) OCT it is possible to examine these patients more precisely obtaining high-quality scans with enhanced penetration through the retina and the choroid.

SS-OCT findings are essential in these high myopic eyes due to the poor results usually obtained with a regular fundus examination. Therefore, SS-OCT plays a key role to make a proper diagnosis and to determine the more appropriate therapeutical approach.

The more relevant vitreoretinal interface disorders in patients with high myopia are vitreomacular adhesion, vitreomacular traction, retinoschisis, epiretinal membrane, lamellar macular hole, full-thickness macular hole and macular hole retinal detachment. In particular, the splitting of the inner and outer retinal layers can be nicely observed with SS-OCT just like to monitor its potential progression to a macular hole.