Use corneal hysteresis to identify high-risk glaucoma patients

The Science behind the Tip

Identifying those patients at greater risk of disease progression is a key step in glaucoma management algorithms. Several variables have been identified as risk factors, such as intraocular pressure, age, cup-disc ratio, disc hemorrhages and corneal thickness. Biomechanical properties of the cornea may also play a role in glaucoma pathophysiology.

Corneal hysteresis (CH) is a tissue viscosity measurement available with a commercially available device. CH is lowered in glaucoma patients, in both high- and normal-tension disease. A low CH is a strong predictor of visual field progression in open-angle glaucoma patients, although a causal relationship is yet to be determined. Thus, CH measurement may be a helpful tool in identifying patients at a higher risk of progression and disability.

References


Contributor: Rafael Correia Barão MD - Hospital Santa Maria, CHULN, Lisbon, Portugal