Unilateral ocular hypertension: have a look at the corneal endothelium

The Science behind the Tip

Unilateral ocular hypertension or glaucoma is often associated with secondary causes that should be explored to ascertain the visual prognosis and to optimise the clinical management of the eye. Beside gonioscopy, which is essential to seek aetiologies such as narrow angle, neovascularisation and angle recession, evaluation of the corneal endothelium could be helpful when clinical ocular examination remains inconclusive.

Indeed, early stage of iridocorneal endothelial (ICE) syndrome can be identified with specular microscopy, which shows unilateral large, irregular endothelial cells with pathognomonic hyperreflective membranes\(^1\). Also, confocal microscopy can point to to subclinical exfoliative material which is observed as diffuse scattered hyperreflective deposits\(^2\). Finally, in cases of possible previous or subclinical anterior uveitis of viral cause, deposits of inflammatory cells or residual signs of corneal endothelitis can also be found on confocal microscopy\(^3\).

References


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