
Pseudoglaucomatous optic disc

Mohamed Abd El-Wahed Mohamed

Pseudoglaucoma is defined as false or deceptive glaucoma with or without ocular damage. Pathologic cupping of the optic nerve is most commonly associated with glaucomatous optic neuropathy. However, other types of optic neuropathies have been reported to cause cupping of the optic nerve, mimicking that found in glaucoma which is collected under the rubric pseudoglaucomatous optic disc. Pseudoglaucomatous optic disc may produce a zone of confusion and is -considered as a daily challenging diagnostic dilemma for subspecialty trained neuro ophthalmologist or glaucoma specialist because of optic disc appearance without an elevated IOP. Some cases of congenital optic disc anomalies, hereditary and acquired optic neuropathies, developing disc cupping and may be misdiagnosed and treated as glaucoma. Therefore, Diagnostic evaluation and screening should be done to each case of glaucoma to rule out pseudoglaucoma. Patient history, demographic data, careful clinical evaluation of fundoscopic findings of the ONH, visual fields assessment and neuroimaging may be the key to unlocking the diagnosis of glaucomatous versus pseudoglaucomatous optic disc. FFA, A/B scan, serology and DNA analysis can be ancillary diagnostic testing. New imaging technology for ONH and RNFL analysis has developed recently that can abolish that zone of confusion and help in decision making by regular following up of the patient. Three commercially available diagnostic imaging instruments. Optical coherence tomography (OCT), a confocal scanning laser ophthalmoscope [Heidelberg Retina Tomograph (HRTII)], and a scanning laser polarimeter (GDx VCC). Each instrument makes use of different properties of light and different characteristics of retinal tissue to obtain their measurements. Each instrument now includes an age-adjusted normative database so that measurements can be easily identified as borderline or -outside normal limits. This adjustment is important, as there is a reduction in nerve fiber count with age. In conclusion, mind association between increased cupping and glaucoma should be changed and a special attention should be given to pseudoglaucomatous optic disc cupping and how to differentiate from glaucomatous cupping that has been virtually ignored.