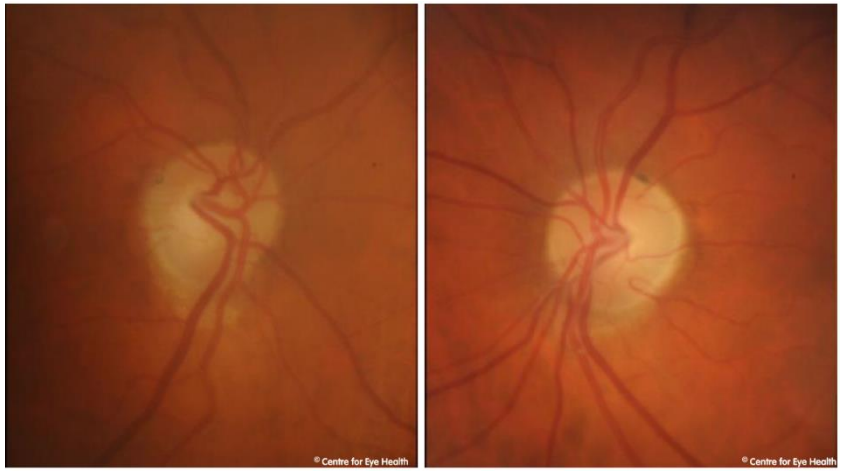
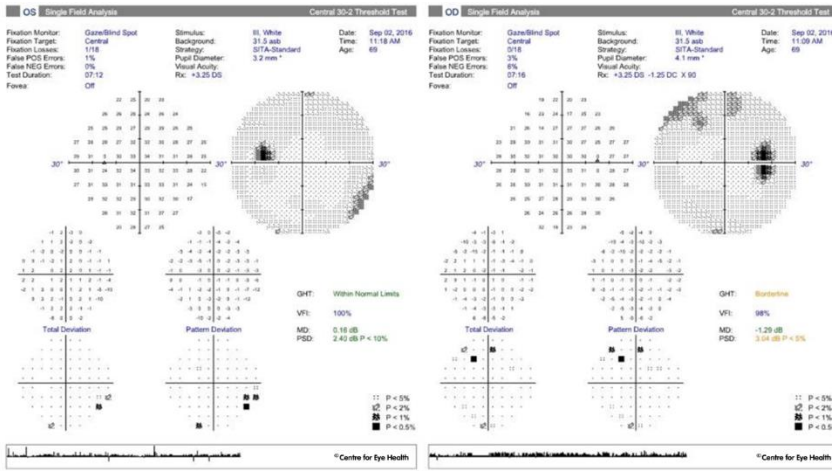
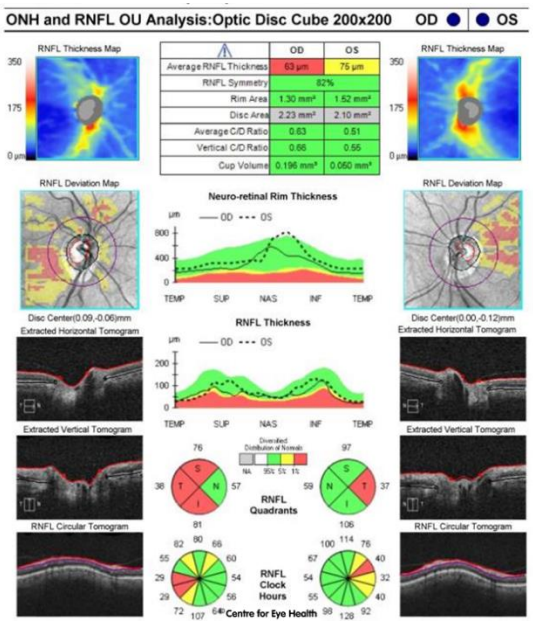
CFEH facebook Cases

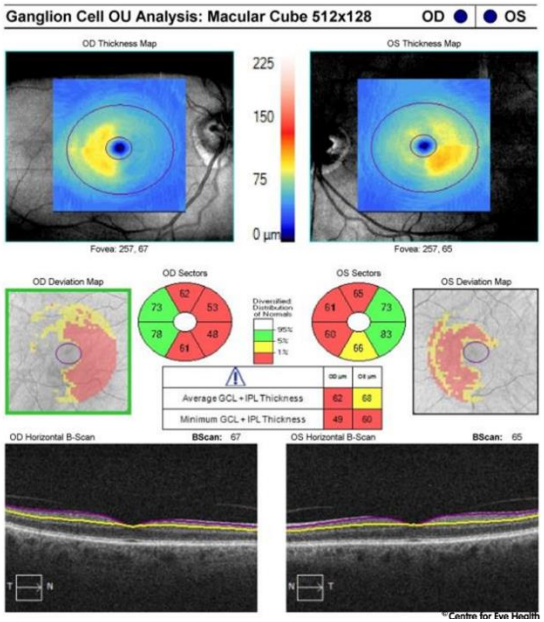
CFEH Facebook Case #136

A 62 year old Caucasian male was referred for assessment. He has a complex medical history including ischaemic heart disease, cancer, type 2 diabetes, thyroid disease and has had previous surgery for a pituitary tumour and now has panhypopituitarism. D-15 colour vision testing revealed 4 crossings on each eye along the red-green axis. Best corrected vision was 6/6-2 in each eye. Imaging and field results are below. Does this patient have glaucoma?









Centre for Eye Health Education
A joint initiative of Guide Dogs NSW/ACT and The University of New South Wales

Answer

The disc photos show bitemporal pallor but no significant cupping or thinning of the neuro-retinal rim that would be typical of glaucoma. The visual field defects are not typical of glaucoma, with no structure-function concordance with the OCT results.

GCA showed bi-nasal thinning of the ganglion cell layers, with areas of thinning respecting the vertical midline. This pattern of thinning is suspicious of neurological damage, and, in this case, the cause is retrograde degeneration secondary to neurological damage

The key clinical messages here are that Structure-function discordance is a suspicious feature in optic nerve disease, especially in the absence of characteristic glaucomatous changes at the optic disc. In cases where GCA thinning respects the vertical midline, neurological causes should be excluded.