

# Practical landmarks for visual field disability in glaucoma

Saunders LJ, Russell RA, Crabb DP.

City University London, London, UK.

**BACKGROUND/AIMS:** To assess whether mean deviation (MD) from automated perimetry is related to the visual field (VF) component for legal fitness to drive (LFTD) in glaucoma patients.

**METHODS:** Monocular 24-2 VFs of 2604 patients with bilateral VF damage were retrospectively investigated. Integrated visual fields were calculated and used as a surrogate to assess LFTD according to current UK driving licence criteria. The better eye MD (BEMD), worse eye MD (WEMD) and a measure utilising MD of both eyes were compared, to assess respective diagnostic capabilities to predict LFTD (using the integrated visual field surrogate test as the gold standard) and a 'Probability of Failure' (PoF) for various defect levels was calculated.

**RESULTS:** BEMD appears to be a good predictor of the VF component for a patient's LFTD (receiver operating characteristic area under the curve: 96.2%) ; MDs from both eyes offered no significant extra diagnostic power (area under the curve: 96.4%) . PoF for BEMD thresholds of  $\leq -10$  dB and  $\leq -14$  dB were 70 (95% CI 66% to 74%) and 92% (87% to 95%) , respectively.

**CONCLUSION:** There is a strong relationship between BEMD and a patient's LFTD. PoF values for LFTD associated with readily available MD values provide practical landmarks for VF disability in glaucoma.

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