Is formal visual field testing essential prior to upper eyelid surgery in a post-COVID-19 era?

Magnus Theodorsson1 · Cristina Soare1 · Oana Vonica1 · Hooman Sherafat1

Received: 19 June 2020 / Revised: 7 July 2020 / Accepted: 14 July 2020 / Published online: 21 July 2020
© The Royal College of Ophthalmologists 2020

To the Editor:

The COVID-19 pandemic has had an unprecedented effect in halting all non-urgent ophthalmic surgery in the UK. Patients who have been waiting for their procedure for several months, or possibly over a year, will have to continue doing so, and new patients face an even longer wait than they would have had prior to this pandemic.

In addition to clinical visits and surgical procedures, investigations such as visual field testing have also been greatly reduced to minimise the risk of exposure and transmission of SARS-CoV-2 [1, 2]. The current circumstances impose revisiting some of the existing guidelines that may no longer be practical during the pandemic and beyond. Currently, most Clinical Commissioning Groups (CCGs) in the UK require clinicians to perform visual field testing prior to listing for surgical correction of upper eyelid ptosis, blepharoplasty and brow ptosis. This cost-saving initiative has been widely used to differentiate between patients with “functional” and “cosmetic” problems [3]. Most CCGs require all patients to undergo visual field testing (preferably automated perimetry) if their Marginal Reflex Distance-1 (MRD1) is not 1.0 mm or less, and a reduction of field to 120° laterally and 40° vertically should be demonstrated. Others, such as North West London and elsewhere across the country, have made formal visual field testing mandatory, irrespective of the MRD1 measurement, to establish eligibility for surgery in the National Health Service.

The testing of visual fields involves close proximity of technician and patient, potential transmission of the virus via the visual field machine, and additional time in hospital. The Royal College of Ophthalmologists’ (RCOphth) guidelines relating to COVID-19 highlight both the necessity of limiting patient and staff exposure within the hospital environment, and lengthy investigations that do not comply with the UK Government’s social distancing rule [2]. These guidelines also state that avoidances should be made unless it is “critical to decision-making”, even prompting subspecialties such as Glaucoma, which cannot dispense with vital visual field testing, to make efforts to limit its use wherever possible. Large prospective studies have shown that the majority of patients with a MRD1 of even 2.0 mm or less have superior visual field reduction [4, 5]. This correlation of MRD1 with visual field loss suggests that formal testing of the latter is not essential, and the impact of ptosis on visual fields may be confirmed by the clinician raising the patient’s eyelid in order to elicit improvement in field on confrontational testing.

CCGs should recognise the clinician’s assessment and judgement, objectively supported by photographic documentation, in determining whether surgery is justified or not. Patients may be suffering from clinically significant blepharoptosis, brow ptosis or dermatochalasis that merits the surgeon to arrange ptosis repair, brow lift or blepharoplasty respectively, yet they must currently undergo a non-essential and potentially exposing test prior to treatment in spite of the expert clinical opinion already provided. In addition to increased waiting lists from postponed Oculoplastic operations, continued adherence to the CCG requirements will cause added delays since perimetry investigations are not occurring as readily as before. Furthermore, it will delay other patients for whom this investigation is more vital to their care. We acknowledge the lower priority (Level 5) of non-cancer eyelid surgery as per the RCOphth guidelines but, as services resume, both clinical efficiency and patient safety must be considered [6].

In preparation for re-opening the Oculoplastic surgery services—in the interests of patients, hospital staff and congested departments nationwide—we suggest formal visual field testing is not essential in patients with a MRD1

* Magnus Theodorsson
magnus.theodorsson@nhs.net

1 Royal Eye Unit, Kingston Hospital NHS Foundation Trust, London, UK
of 2.0 mm or less when assessing eligibility for surgical
intervention.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of
interest.

Publisher’s note Springer Nature remains neutral with regard to
jurisdictional claims in published maps and institutional affiliations.

References

1. Teo KYC, Chan RVP, Cheung CMG. Keeping our eyecare
providers and patients safe during the COVID-19 pandemic. Eye.
2020. https://doi.org/10.1038/s41433-020-0960-7.

2. The Royal College of Ophthalmologists. Management of
Ophthalmology Services during the Covid-19 pandemic, 2020.
RCOpth-Management-of-Ophthalmology-Services-during-the-
Covid-pandemic-280320.pdf. Accessed 14 June 2020.

3. Fuller ML, Briceño CA, Nelson CC, Bradley EA. Tangent screen
perimetry in the evaluation of visual field defects associated
with ptosis and dermatochalasis. PLoS ONE. 2017;12:e0174607.
https://doi.org/10.1371/journal.pone.0174607.

4. Ho S, Morawski A, Sampath R, Burns J. Modified visual field test
for ptosis surgery (Leicester Peripheral Field Test). Eye. 2011;
25:365–9. https://doi.org/10.1038/eye.2010.210.

5. Cahill KV, Bradley EA, Meyer DR, Custer PL, Holck DE, Marcet
MM, et al. Functional indications for upper eyelid ptosis and
blepharoplasty surgery: a report by the American Academy of
Ophthalmology. Ophthalmology. 2011;118:2510–7. https://doi.org/
10.1016/j.ophtha.2011.09.029.

6. The Royal College of Ophthalmologists. Prioritisation of ophthalmic
procedures. 2020. https://www.rcophth.ac.uk/about/rcophth-covid-
19-response/rcophth-guidance-on-restoring-ophthalmology-services/.
Accessed 19 June 2020.