

# Thinking outside the box – adapting to the COVID-19 lockdown

BY AMAR ALWITRY

How can we avoid further delays to follow-up in glaucoma patients? The author asks if there is a socially distanced way to check IOPs in those at high risk of losing vision.

**G**laucoma is an asymptomatic condition. Loss of the visual field can occur silently without the patient suspecting it is occurring. With the lockdown, most face to face ophthalmology appointments are being cancelled and replaced with either no appointment or a telephone consultation. Once the lockdown eases then there will be a massive backlog of patients to be seen when our services are already creaking under the load. While some patients will be able to be discharged as they were being inappropriately followed-up, the majority of patients in our service do need follow-up. We cannot check intraocular pressures (IOPs) over the phone and the patients have no possible way of assessing their own IOPs.

Before the COVID-19 epidemic there was a legitimate and prevalent concern regarding the loss of vision occurring due to delays in follow-up for glaucoma patients. The Royal College of Ophthalmologists published a surveillance report of patients losing vision due to delays in treatment and follow-up appointments [1].

The research, conducted through the British Ophthalmological Surveillance Unit (BOSU), found patients suffering permanent and severe visual loss due to health service-initiated delays. The research, involving all UK consultant ophthalmologists, showed that up to 22 patients per month may be losing vision by such delays.

The surveillance study through the BOSU was able to establish diagnosis, length of delay and cause of vision loss over a 12-month period, March 2015 – February 2016. Of the 169 patients that reported of preventable loss of vision, 132 experienced permanent deterioration of vision, along with 15 unplanned surgical procedures and six emergency hospital admissions. Forty-two patients were registered as Severely Sight Impaired or Sight Impaired.

In 2009 the National Patient Safety Agency (NPSA) identified that it had received 44 reports of concerns about patient safety due to delays in appointments for glaucoma patients, of whom 13 went blind over a four-year period. This stimulated a Rapid Response Report (NPSA/2009/RRR004) [2].

The Health and Safety Investigation Branch reported on this very issue and raised the same concerns regarding delays to follow-ups resulting in visual loss.

It is clear there was a significant issue and patients were losing vision even before COVID-19 came onto the scene.

Many ophthalmologists are carrying out telephone consultations instead of face to face appointments. Patients are often questioned regarding their compliance with their drop regimens and the state of their vision. There is no way to assess IOP and patients could have significantly raised IOPs with progression of their glaucoma and this would occur entirely undetected. Often these patients have already had a delay to their follow-up and will face a further delay until the lockdown eases and then the backlog of follow-up appointments are addressed.

How can we keep such patients safe? What is the danger to these patients? Subtle and slow deterioration is unlikely to have a significant



impact upon the patient, however, some patients will suffer rapid progression even if they have been stable for some time. This is more likely if the IOP silently increases significantly. Some of the patients having telephone consultations will have markedly raised IOPs, which will remain undetected and result in visual loss. Is such visual loss avoidable? We are all attempting to triage and risk stratify patients but this will mean the low risk patients, who are already the ones who are likely to have been delayed already, will suffer further delays. Some of these patients will lose vision.

Even a routine 'low risk' patient can lose vision, as exemplified by a recent medicolegal case I dealt with. A patient had an IOP of 18mmHg on one eye drop for the preceding 10 years and at their last visit an appointment was planned for a year later. Due to pressures and capacity issues the appointment was delayed for eight months as they were deemed 'low risk'. When the appointment occurred the IOPs were circa 35mmHg in each eye. They were entirely asymptomatic, but their visual fields had progressed to the level where their driving license was lost. The case was settled out of court as there was a clear breach of duty in not seeing the Claimant when planned and, on the balance of probabilities, had the Claimant been seen on time their IOP would have been measured and found to be high. This would have, on the balance of probabilities, prompted more treatment to lower the IOP and some of the visual field loss would have been avoided.

The fundamental question which such patients will ask us is whether there was any way they could have had their eye pressures measured? Many of them will be in the 'at risk' categories and should be isolating at home. As clinicians, we have to balance up the theoretical risk of contracting COVID-19 with the real risk of visual loss due to the delay to follow-up. We also need to mitigate the risk to the clinician themselves of exposure to patients who themselves already have COVID-19. We are all sadly aware of the loss of life amongst our healthcare colleagues.

There is work on-going regarding home monitoring of IOPs with contact lens-based devices and indeed patients can purchase the

iCare™ tonometer for use at home, but this expense is beyond most patients and does not address the issues here and now.

Utilising optometrists for IOP checks is a reasonable option, however, can we say that the measurement of an IOP is an essential / emergency intervention? Many optometrists are also struggling for PPE and we need to be aware of the risks to them. There are also logistical issues regarding how such pressure measurements will make their way back to the hospital eye service.

One novel idea is that of a drive through IOP measurement service. This service could safely and efficiently measure IOPs in patients, with minimal risk to either the patient or the practitioner. Utilising the iCare Tonometer™ (which is not aerosol generating) a doctor or allied professional in full PPE could check the patient's IOP. Patients due for a telephone consultation could be advised to attend the drive-through IOP service the week before their telephone consultation. They will be instructed not to attend if they have a cough, fever or any other suspicious features for COVID-19. The patient would not leave the car but simply roll their windows down and allow the practitioner to lean in to check their IOPs. This reading would be documented and be available for the telephone consultation the following week. This extra information will allow proper risk stratification so that patients with a low IOP can be safely delayed, while those with a high IOP can be prioritised and brought in either before lockdown ends or early when the restrictions ease. The ability to safely delay appointments in genuinely low risk patients will ease the load and allow us to see those patients truly at risk of visual loss.

The benefits of this service are clear with regards protecting the patient and preserving vision. It is clearly not ideal and does not adhere to National Institute of Health & Care Excellence (NICE) guidance, but it is certainly better than not checking an IOP at all which in no way adheres to any pre-COVID lockdown standard of care.

Do we really imagine that our eye services will be back to full capacity quickly, with our waiting areas once again packed with glaucoma and ocular hypertensive patients sitting elbow to elbow?

In the end, we are all facing unprecedented challenges and we can only do our best for our patients. I fear that we may be faced with a cohort of patients who face delays and will lose vision due to undetected glaucoma progression. Initiatives to try and check IOPs should be encouraged as we adapt and flex in the unsettling situation we find ourselves in.

#### References

1. Foot B, MacEwen C. Surveillance of sight loss due to delay in ophthalmic treatment or review: frequency, cause and outcome. *Eye (Lond)* 2017;**31**(5):771-5.
2. Learning from patient safety incidents. NHS Improvement: <http://www.nrls.npsa.nhs.uk/alerts/?entryid45=61908> Last accessed May 2020.
3. Lack of Timely Monitoring of Patients with Glaucoma. Healthcare Safety Investigation 2019/001: [https://www.hsib.org.uk/documents/199/hsib\\_report\\_lack\\_timely\\_monitoring\\_patients\\_glaucoma.pdf](https://www.hsib.org.uk/documents/199/hsib_report_lack_timely_monitoring_patients_glaucoma.pdf) Last accessed May 2020.

#### AUTHOR



**Amar Alwitary FRCOphth MMedLaw,**

Consultant Ophthalmologist,  
Leicestershire and Nottingham, UK.