Fitness-to-drive decisions a major responsibility in glaucoma patient care

Cynthia Owsley

Determining the glaucoma patient fitness to drive presents a complex dilemma for ophthalmologists who need to consider existing laws, possible medico-legal consequences, and the impact of driving cessation on the patient’s life.

As the older population escalates in size and because glaucoma prevalence increases with age, this is a task that ophthalmologists will need to face increasingly in the future, emphasised Cynthia Owsley, MScPH, PhD, professor of ophthalmology, University of Alabama at Birmingham, at the annual meeting of the AAO.

Deciding that a glaucoma patient should not drive is a complicated issue because it has considerable consequences that extend well beyond creating a personal inconvenience for the affected individual.

“Numerous studies link driving cessation to incident depression and social isolation among older adults, and there is also evidence that lack of transportation is a barrier to eye care and healthcare utilisation. Considering the impact on quality of life and access to critical activities of daily living, the recommendation for driving cessation should not be taken lightly,” Dr Owsley has conducted a number of studies investigating the effect of glaucoma-related vision impairment on driving performance and safety. She noted that assessment of the glaucoma patient’s driving fitness might also be accompanied by various legal liability issues for the physician. O ne consideration in the US is that some states have laws mandating physicians to report drivers with medical conditions, including glaucoma, that threaten driving safety.

“It is also important to be aware that there have been a growing number of legal cases where persons injured in motor vehicle collisions or their families sought damages from the driver causing the crash as well as from the physician caring for that individual,” Dr Owsley said.

Once a patient is reported to the state licensing authority, a medical review process is usually initiated to determine driving fitness. However, it is also useful for physicians to know that all states in the US have a legally mandated appeals process if licence revocation is recommended.

“Persons with visual impairment have appealed non-licensure decisions by their state’s division of motor vehicles under the Americans with Disabilities Act and have won in some cases where there was no evidence basis that they posed a safety threat,” Dr Owsley said.

Issues for European drivers

Just as laws on mandatory physician reporting vary among states within the US, so too are there differences among countries in Europe.

Some European countries, including Sweden and Finland, have legal requirements mandating physicians to notify the licensing authority about patients with conditions affecting driving fitness. In other countries, the UK being one, there is a legal obligation for persons holding a driving licence to notify licensing authorities if they develop a condition that affects driving safety. Patients with glaucoma need to give notice when they are diagnosed with bilateral disease, explained Heather Major, MD, senior medical advisor, Driver and Vehicle Licensing Agency (DVLA), Swansea, UK.

“Interestingly, the rate of notification of patients with glaucoma and other vision-limiting conditions does not seem to be any greater when the obligation is put on the doctor versus on the patient,” she noted.

The situation in Europe regarding vision and driving may change in the future. In its report on new standards for the visual function of drivers, the Eyesight Working Group to the European Commission Driving License Committee has recommended that licence holders in all EU countries be required to notify their national licensing authority if they develop a vision-imparing condition. (See sidebar.)

Although ophthalmologists in the UK do not have a legally binding obligation to notify the DVLA about patients who have glaucoma, they are bound by the professional duty of care agreed to by the General Medical Council to inform patients of their personal need to notify the licensing authority.

“O nly exceptionally, if the patient ignores that advice and continues to drive when medically unfit to do so is the ophthalmologist legally safeguarded in notifying the licensing authority directly. O therwise, there is a medico-legal expectation that physicians in the UK will retain confidentiality of a patient’s condition unless the risks to the public outweigh that duty,” Dr Major said.

Vision standards for driving licence eligibility are set forth in the EU Directive on Driver Licensing and apply across all EU member states. For individuals driving personal vehicles, the directive currently requires a minimum horizontal field of 120 degrees, although exceptional cases that do not meet this standard can be considered. However, there are differences between countries in how that standard is administered.

“T here are many variations in the protocol for evaluation and licensure of persons who are known to the licensing authority to have a progressive visual condition but are not yet deemed to have a de-barring disability. For example, differences exist with respect to how frequently persons are re-evaluated and whether the testing is done centrally or locally by the ophthalmologist or a licensing authority,” Dr Major said.

In the UK, when a glaucoma patient first becomes known to the DVLA, that individual undergoes an assessment of visual acuity and of visual field impairment. If the results do not lead to licence revocation, the licence may be issued for periods ranging from one to three years depending on the extent and location of field loss and the ophthalmologist’s input regarding whether the patient’s condition is stable or progressing.

A number of studies have examined the relationship between glaucoma and driving-related outcomes. However, there have been some conflicting results regarding whether glaucoma patients pose a safety risk, which may reflect in part self-regulation to limit exposure to risky situations.

Based on studies correlating driving performance and crash risk with the level of visual field impairment, Dr Owsley suggested initiating a “driving dialogue” once an individual develops more than moderate field loss in one eye. That conversation should highlight issues relating to the importance of peripheral vision on driving safety.

“T he development of standards for those parameters is a project for the future considering these are areas of emerging knowledge, said Dr Major, who was a member of the EWG. “Currently, techniques for assessing these features are limited and/or not well-validated, and even where they were measurable, there is no information available for defining appropriate limits for safe driving,” she said.

Dr Major noted that the International Council on Ophthalmology was reviewing its recommended visual standards for driving at about the same time as the EWG, and the two committees exchanged information. As a result, there are many similarities between the recommendations issued by the two groups.

The EWG report has been open for review. Later this year, members of the European Commission Driving License committee will meet to discuss the comments received by the 27 member states of the EU. Based on that information, it is anticipated that a set of proposals will be put forward regarding what elements of the recommendations should be adopted, where further scientific evidence is needed, and which standards should remain unchanged. A final vote on those proposals will follow.

Proposed updates aim for evidence-based driving vision standards

In 2005, the Eyesight Working Group (EWG) to the European Commission Driving License Committee issued a report summarising recommendations on possible revisions to the standards for visual functions of drivers set out in Directive 91/439/EEC issued in 1992. The EWG consisted of ophthalmologists, scientists, and licensing experts from several European countries who examined the medical literature evidence base in order to determine where changes were needed in the existing directive.

One of the major recommendations of the EWG was to reformulate visual acuity requirements so that they are binocular instead of monocular. In addition, the EWG advised several changes regarding visual field standards. Those include a need for more explicit specification of the measurement technique, a requirement for absence of central field defects, and a requirement for incorporating the vertical extension in addition to the horizontal component.

The EWG also reviewed information on the effects of glare, stray light scatter, and changes in contrast sensitivity on visual function. However, the development of standards for those parameters is a