MINUTES OF THE MEETING OF
THE SECRETARY OF STATE FOR TRANSPORT'S HONORARY MEDICAL ADVISORY PANEL ON DRIVING AND DISORDERS OF THE NERVOUS SYSTEM

Thursday, 22 March 2018

Present:

Professor G Cruickshank	Chairman
Professor A G Marson	
Mr R Macfarlane	
Dr A R Gholkar	
Professor J Duncan	
Dr C Tudur Smith	

Lay Members:

Ex-officio:

Dr N Delanty	National Programme Office for Traffic Medicine, Dublin
Dr S Bell	Maritime and Coastguard Agency
Dr N Lewis	Panel Secretary, DVLA
Dr W Parry	Senior Medical Doctor, DVLA
Mrs R Toft	Driver Licensing Policy, DVLA
Mrs E Melrose	Head of Drivers Medical Group, DVLA
Mrs Sian Taylor	Medical Panel Support, DVLA
Mr D Evans	Complex Cases Senior Lead, DVLA
Mrs S Charles-Phillips	Business Support, DVLA
Dr I Perez	Medical Doctor, DVLA
Dr K Davies	Medical Doctor, DVLA
Dr A Siekacz	Medical Doctor, DVLA

1. Apologies

Apologies have been received from Dr P Reading, Professor P J Hutchinson, Mr R Nelson, Professor R AL-Shahi Salman, Mr C E B Jones, Dr C Graham and Dr S Mitchell.

2. Chairman's remarks

Professor Cruickshank welcomed those present to the meeting. He commented that although there had been difficulty in recent years due to the freeze on recruitment to the panel, he looked forward to an update on the recruitment situation in today's meeting. He informed the panel that since the Autumn panel meeting, Professor Marson, Dr Parry and he, had given a talk at the Royal Society of Medicine (RSM) on the subject of epilepsy and driving; it was evident that there is a requirement to increase awareness of the work of the panel and of the medical standards on fitness to drive. It was agreed that education and updates to clinicians should be discussed further during the 'any other business' agenda item later in this meeting.

3. Minutes of the meeting of 12/10/2017

Professor Duncan commented that with regard to item 7, the panel had been advised that a legislative change would be required. It was agreed that this would be noted for the final version of the minutes.

The minutes were otherwise confirmed as being accurate and correct.

Matters arising from the minutes (specifically item 11.6) were discussed and it was agreed that these would be covered in more detail during today's meeting.

*The outcome of the later discussions meant that seizures occurring in the scenarios listed in Item 11.6 (i.e. seizures due to encephalitis/meningitis (during the acute febrile illness), venous thrombosis, SAH from aneurysm and seizures due to prescribed medication/drugs/alcohol may hence forth be regarded as provoked seizures, but driving would not be permitted for six months following this type of provoked seizure. Although this topic was not specifically revisited during the

meeting, both epileptologists and the panel chair subsequently confirmed this interpretation to be appropriate.

4. Recruitment update

DVLA informed the panel that recruitment had taken place to identify suitable candidates for panel experts in neuro-rehabilitation, chronic neurological disorders and neuro-oncology, and that three new members have accordingly been appointed to the panel.

A cautionary note was raised by the Panel Chair about the importance of informing the panel and Chair of progress during the recruitment phase, in order to keep the process transparent and optimal. Thanks were expressed for appointing new members but it was suggested that hence forth panel be kept in the loop with regard to recruitment in order to provide support to ensure the required expertise is available to address the issues raised at panel.

5. Professor Duncan's study on post epilepsy risk of seizures[1]

Professor Duncan gave a synopsis of the recently published paper. The outcomes showed that the annual risk of seizures with loss of awareness in the group of patients who only experience aura (with no loss of awareness) following surgery is less than 20% after the first year post-surgery. It would therefore seem reasonable to allow these patients to drive Group 1 vehicles one year post-surgery, despite on-going auras, however at present legislation does not permit this due to the previous (pre-surgery) history of other types of seizure, with loss of awareness. Professor Duncan was able to provide detail of the nature of the auras experienced and was able to confirm that in the majority of cases the auras did not cause any functional impairment. The majority in this group would therefore benefit from a change to the legislation. It was noted that the legislation was drawn up without consideration specifically to this group of patients and agreed that advantage should be taken of the fact that data are available to support a challenge to the legislation. Panel supports a change to the legislation to allow these patients, who only experience seizure with no

altered awareness and no impairment of function, to return to driving one year after surgery.

There was uncertainty about whether EU legislation as well as UK legislation prohibits driving in these circumstances and the policy department at DVLA agreed to investigate what other European countries are doing about licensing these drivers. Pr N Delanty noted in the meeting that in Ireland such individuals would be permitted to drive.

6. Provoked seizures (discrepancy between timescales for head injury and intracranial surgery/stroke induced seizure)

It was agreed that DVLA should adopt the same timescales as those used by the International League Against Epilepsy (ILAE) which defines provoked seizures as those occurring within a week of brain trauma or stroke and within 24 hours of a metabolic insult.

7. Are multiple seizures within the permitted time period all considered as provoked?

After much discussion about provoked seizures it was agreed that Professors Marson and Duncan would prepare a proposal for panel with recommendations as to how to define provoked seizure and what the effect on licensing should be of seizures occurring in various provoking situations. To date, seizures which met the criteria to be considered as provoked from a licensing point of view were dismissed and did not incur any time off driving, however the degree of risk in various clinical scenarios varies and it would be reasonable therefore to vary the driving restrictions accordingly, where the risk of seizure exceeds the 20% threshold. An observation was made that the use of the term 'provoked' is confusing because in clinical practice it includes seizures that would not be considered as provoked from a licensing point of view, however the term is used in legislation to distinguish between isolated seizure (which requires six or twelve months off) and provoked seizure for which no set time off driving is specified in law.

8. Provoked seizures (should there sometimes be a period of driving cessation?)

Discussion continued from the previous agenda item and consideration was given to the Brown et al. paper[2]. The conclusion was that the data support a minimum of a five month period of driving cessation for provoked seizures and do not support a shorter duration even for seizures provoked by metabolic causes. Panel therefore supported a period of six month's driving cessation for all types of provoked seizures, where there is no previous (unprovoked) seizure history. This guidance may be refined (exceptions identified) following further analysis of the data from this study and data from the NGPSE study (National General Practice Study of Epilepsy), which Professors Marson and Duncan will consider in their proposal to panel (see Item 7 above). The proposal will be circulated amongst panel members as soon as possible and reviewed at the autumn meeting.

There was agreement that if a person has any history of unprovoked seizure, (with the exception of febrile convulsions, (which can be ignored from a licensing perspective) then any subsequent seizure would require twelve months off driving, regardless of the period of time between the previous and subsequent seizure and regardless of the circumstances of the later seizure. An example was given of someone with a history of epilepsy and a recent seizure in the context of a severe hyponatraemia. It was agreed that as a person with epilepsy is at increased risk of seizures, so the recent seizure should be considered still to be an epileptic seizure, although it was 'precipitated' by the hyponatraemia. Twelve months off driving are therefore required, as opposed to the six months required for a provoked seizure in the same circumstances in a person with no previous history of unprovoked seizure. Similarly, for someone with a history of perinatal seizures and an abnormality on brain imaging, a subsequent reflex anoxic seizure would require twelve months of driving cessation.

As the six month period of driving cessation following a provoked seizure is a significant change to previous practice, the panel was concerned that this must be clearly communicated to clinical colleagues (considered under 'any other business' below).

9. Epilepsy algorithm; anti-epilepsy drug (AED) withdrawal risk calculator

Dr Parry explained that he had received an email from a neurologist asking whether the panel was aware of the algorithm on seizure recurrence after withdrawal of AEDs; hence the relevant paper[3] and risk calculator were sent to the panel members prior to the meeting. The current guidance to stop driving for the tapering period and for six months following withdrawal of AEDs is considered to be pragmatic and appropriate. If a seizure occurs in the context of a physician-advised withdrawal or change of medication the legislation permits relicensing six months after the seizure and the return to previously effective medication. It was noted that there are no conditional data to assess whether this is appropriate, however, as this is prescribed in legislation further analysis by the panel is not warranted.

10. When Group 1 driving is not permitted for three months after head injury, for how long should drivers cease driving Group 2 vehicles?

Professor Hutchinson, who was unable to attend this meeting provided written advice stating that there is evidence that seizure risk falls very quickly, to a very low level for mild head injuries where there is a full clinical recovery, no seizures, no post traumatic amnesia (PTA) lasting >24 hours and no intracranial haematoma nor contusion seen on CT imaging, and these drivers should therefore be allowed to resume Group 1 driving without waiting for the three months required of the current published standards – i.e. they should drive on recovery. He also considered the same scenario but with a small subarachnoid haemorrhage (SAH) (and no other evidence of trauma on imaging) and, as documented in the minutes from April 2016, agreed that again, driving on recovery would be appropriate for Group 1.

For Group 2 he felt that it would be appropriate to have a period of driving cessation following a mild head injury, and suggested that a minimum of three months off

driving and a full clinical recovery would be required in the first scenario (no evidence of trauma on scan, no seizure, no PTA > 24 hrs,); and if there were a small SAH in isolation then a minimum of six months off driving and documented evidence of full clinical recovery would be reasonable.

The panel was grateful to Professor Hutchinson and agreed that the risk of seizure is indeed likely to be below 2% by six months, and that the guidance as recommended should be adopted.

11. Standards for cough pre-syncope

Continuing a discussion from the Autumn 2017 panel meeting at which the panel was advised that the pathophysiology of cough pre-syncope is different from that of cough syncope, it was agreed that the medical standards for cough pre-syncope should be the same as those for typical vasovagal synope. It was also agreed that all other cases of recurrent pre-syncopal events should be treated (from a licensing point of view) in the same way as recurrent syncope, and should therefore be categorized according to the standards for recurrent syncope in the Assessing Fitness to Drive (AFTD) document.

12. Typical carcinoid tumours in the lung

Panel was asked whether these tumours can be treated differently from other lung cancers because of the very low risk of metastasis to the brain. It was agreed that this would be appropriate and that Group 2 driving need not necessarily therefore cease.

13. Cataplexy

There is currently no standard in AFTD for cataplexy. Given that cataplexy nearly always occurs with narcolepsy, it was agreed that the standard in AFTD relating to narcolepsy hence forth be applied to the 'narcolepsy/cataplexy syndrome'.

14. Intracranial haemorrhage (ICH) from arteriovenous malformation (AVM)

Panel was asked whether there should be a one month driving restriction following intracranial haemorrhage from an AVM, as for stroke. Professor Al-Shahi Salman who was unable to attend this meeting provided written advice confirming that this would be appropriate. He remarked that AVM-related ICH probably has a higher risk of recurrence than spontaneous ICH (unrelated to AVM) in older people. He also kindly provided a paper with the best available data on recurrence risk[4].

Panel was grateful for Professor Al Shahi-Salman's guidance and confirmed that hence forth a one month driving restriction would be required following ICH from AVM.

15. Parkinson's disease and J (5-year) licences

Panel was asked whether the issue of 5-year licences is still considered to be appropriate, given the progressive nature of the condition and published evidence of a longitudinal decline of driving safety and increasing risk of cognitive decline with time. Consideration was also given to a letter from a consultant neurologist challenging a question on a DVLA questionnaire, introduced to determine eligibility for a 5-year licence, which asks about about clinical deterioration in Parkinson's disease. Panel advised that shorter period licences were more appropriate and 5-year licences should no longer be issued for Parkinson's disease. The question about clinical deterioration should be reworded to ask about significant deterioration of the driver's condition since last reviewed and the likely hood of future deterioration in the next 1-3 years (ie the duration of the next license) .[5,6]

16. Appeals data

Data about the numbers of appeal cases since the last meeting (October 2017) were reviewed. It was noted that of the 17 appeals which related to neurological conditions, no cases had been upheld in court.

17. Cases for discussion

One case was discussed; this did not raise specific generalisable advice that would be applicable to other cases.

18. Any other business

Various suggestions were made about how to improve communication with medical personnel in clinical practice in order to enhance general understanding and knowledge of the current driving standards. These suggestions, several of which have already been enacted, included:

- Writing an article in the British Medical Journal.
- Liaising with the General Medical Council (GMC) to inform and update doctors and ensure that senior doctors are sufficiently informed to provide advice to their junior staff as well as to patients.
- Communicating with neurologists and neurosurgeons via the Association of British Neurologists and the Society of British Neurological Surgeons.
- Seeking support from the communications department within the Department for Transport.
- Encouraging use of the 'AFTD app'.
- Trying to engage the relevant royal colleges.
- Obtaining publicity via bulletins from medical defence insurers.
- Involving medical schools.

19. Date and time of next meeting

The panel was content to continue to meet in March and in October and advised that it would be helpful to book the dates of the meetings as far in advance as possible (up to 2 years in advance). It was agreed that the next meeting be held on Thursday 11th October 2018.

Original Draft Minutes prepared by DR N LEWIS
Panel Secretary

Date: 29th March 2018

Final Minutes signed off by: Professor G Cruickshank
Panel Chair
Date: 8th June 2018

References

[1] Fairclough S et al. Auras and the risk of seizures with impaired consciousness following epilepsy surgery: implications for driving J Neurol Neurosurg Psychiatry. 2017 Dec 9. pii: jnnp-2017-316578. doi: 10.1136/jnnp-2017-316578.

[2] Brown JWL et al, When is it safe to return to driving following first-ever seizure? *J Neurol Neurosurg Psychiatry* 2015;86;60-64

[3] Lamberink HJ et al. Individualised prediction model of seizure recurrence and long-term outcomes after withdrawal of antiepileptic drugs in seizure-free patients: a systematic review and individual participant data meta-analysis. *Lancet Neurol* 2017;16:523–31

[4] Kim H et al. Untreated brain arteriovenous malformation; patient-level meta-analysis of haemorrhage predictors. *Neurology* 2014;83;590-597

[5] Uc EY et al. Longitudinal decline of driving safety in Parkinson disease *Neurology* 2017;89:1951–1958

[6] Liu g et al Prediction of cognition in Parkinson's disease with a clinical–genetic score: a longitudinal analysis of nine cohorts. *Lancet Neurol* 2017; 16: 620–29