

FINAL

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

13 MARCH 2008

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| Present: | Professor Charles P Warlow Dr A Johnson Professor A D Mendelow Professor M Brada Professor G Cruickshank Dr L Nashef Professor C J Mathias Professor P E M Smith Dr A G Marson Dr P Reading | Chairman |
| Lay members: | Mrs M Cooper Mrs J Wightman | |
| Ex-officio: | Dr J McVicker Dr P Collins Howgill Dr T Carter Dr H G Major Dr I Perez Dr S Williams Dr J E Morgan | DVLNI Civil Aviation Authority Chief Medical Adviser, DfT Senior Medical Adviser & Head of Medical Licensing Policy, DVLA Medical Adviser, DVLA Medical Adviser, DVLA Panel Secretary/MA, DVLA |
| Other: | Dr E Schmedding | Consultant Neurologist, Brussels |

1. Apologies for Absence

Apologies were received from Dr R Al-Shahi Salman, Professor D T Wade, Mr R S C Kerr, Professor I R Whittle, Dr L Read and Mr M Stephenson.

2. Chairman's Remarks

The Chairman thanked Dr Eric Schmedding for attending the Panel meeting and for his presentation on Epilepsy and European Licensing Standards. The

continuing paucity of data regarding health-related contribution to or causation of traffic accidents was noted. The Panel expressed its concern that this topic has been under discussion for the last 10 years, with little progress recorded.

3. Minutes of the Meeting of 28 September 2007

Amendments were made to the following sections:

4.4 Acceptable risk of a seizure after head injury

It was agreed that the relevant section of 'At a Glance Guide to the Current Medical Standards of Fitness to Drive' should be amended to indicate "significant head injury" instead of "serious head injury". (See **Annexe 3.4.4**)

4.5 Therapy in malignant brain tumours:

The penultimate sentence should read, "A chondrosarcoma is an indolent tumour". The last sentence should read, "Chordoma is a tumour of the skull base also arising in vertebral bodies anywhere along the spine with a predisposition to cervical and sacral regions".

5.6 Cases for discussion:

Case 2 - The Panel agreed that this licence holder would need to attain a minimum of 12 months' freedom from further episodes before a Group 2 licence could be considered.

The minutes were then accepted as accurate.

4. Matters arising from the minutes

4.1 Colloid cysts.

Further discussion took place concerning the agreed standards for Group 2 drivers with asymptomatic and untreated colloid cysts. The Panel agreed that if prophylactic medication for seizures was prescribed, each case should be assessed individually. **(See Annexe 4.1)**

4.2 Cavernomas.

The Panel considered further the standards agreed at the last meeting concerning cavernomas. It was agreed that for the time being, risks following radio-surgery should equate with those of an untreated lesion. This is due to the difficulty in confirming complete removal of a cavernoma after radio-ablation.

Further revision was agreed concerning the medical licensing standards for cavernomas and arterio-venous malformations. **(See Annex 4.2)**

4.3 Group 2 driving following stroke.

The Panel agreed that for Group 2 driving, it will not be necessary for an applicant to have recovered fully before being eligible for re-licensing. However, there should be no debarring residual impairment likely to affect safe driving and no other significant risk factors. 'At a Glance Guide to the Current Medical Standards of Fitness to Drive' should be amended to reflect this. **(See Annexe 4.3)**

4.4 Craniotomy and seizure risk.

A debate took place concerning the risk of seizure post-craniotomy. It was agreed that accurate comparative data are limited, but the consensus of opinion was that a Group 1 driver should remain off the road for 6 months after a craniotomy.

5. EC Working Group Report and Update on Seizure Risk: Dr Eric Schmedding

Dr Schmedding gave a presentation to the Panel on the licensing recommendations of the 2nd Working Group of the European Union on Epilepsy and Driving.

The Panel agreed to advise the UK representative to the EC Driving Licence Committee that the following standards would be supportable in terms of the acceptable risk of a sudden and disabling event:

- Group 1, first seizure: 6 months seizure-free before licensing.
- Group 1, asleep seizures: no changes to present standards.
- Group 2, first seizure: 5 years seizure-free before licensing for a driver in the good prognosis group.
- Group 2, epilepsy: no change to present standards.

The following features were consistent with a person being in the good prognostic group:

- No relevant structural abnormality of the brain on imaging.
- No epileptiform activity on EEG
- No anti-epileptic drugs
- Support of the neurologist
- Seizure risk considered to be 2% per annum or less.

These recommendations will be reflected when voting takes place on the draft changes to the Annex of the Directive, at the next Committee meeting in Brussels in April.

Addendum: Voting was deferred until a further meeting when a revised text would be considered.

6. Reflex anoxic seizures

The Panel considered an exchange of correspondence between a neurologist and the Medical Branch at DVLA concerning the advice that a neurologist could give to a patient with a diagnosis of a definite reflex anoxic seizure. It was confirmed that the DVLA cannot give definitive advice to a licence holder as to whether or not they should drive whilst the DVLA Medical Group is making its enquiry. Driving licences do remain legally valid during this process, and the licence holder is advised to discuss whether or not they can drive with their own doctor(s).

If the appropriate specialist involved in any particular case is satisfied that the diagnosis is a reflex anoxic seizure, then that neurologist can advise their patients that they are able to continue to drive.

7. Implantable Electrodes

The Panel thanked Professor Whittle for his paper concerning the incidence of seizures following deep brain stimulating electrode emplacement for movement disorders and pain.

Following discussion, the Panel agreed that the standards for implantable electrodes should remain unchanged except for the addition of the words, “and pain”, to the first section.

It was confirmed that following insertion of electrodes, there is a low incidence of seizure and the only significant risk was of superficial infection. **(See Annexe 7)**

8. Clarification of legal advice regarding ‘Must’ and ‘May’

The Panel approved the wording of the new paragraph in the “At a Glance” booklet, which offers guidance to clinicians on advising patients to surrender their driving licence in the case of breakthrough seizures in those with established epilepsy.

9. Attendance of Neurology Panel Members at Psychiatry Panel Meeting to hear presentation on “Cognitive Impairment and Driving”.

Drs Marson and Reading confirmed their ability to attend the Psychiatry Panel on 12 May 2008.

10. Endoscopic Ventriculostomy

Panel members confirmed that this procedure equates to the insertion of an intra-ventricular shunt or extra-ventricular drain, and that the relevant time off driving under a Group 1 entitlement should be the same; ie. 6 months. (See **Annexe 10**)

11. Brain Biopsy

The risk of a sudden and disabling event following biopsy of the brain was discussed and it was agreed that a Group 1 driver would need to remain off the road for 6 months following brain biopsy per se.

12. Rewording of Neurology Chapter of ‘At a Glance Guide to the Current Medical Standards of Fitness to Drive’

The Chairman thanked Dr Johnson for his work in revising the wording of the Neurology chapter of ‘At a Glance Guide to the Current Medical Standards of Fitness to Drive’. An error was noted on page 10 concerning the Group 2 standards on driving after treatment of a medulloblastoma or low grade

ependymoma. It was confirmed that the word, 'seizure' should be replaced by 'disease'. Possible inconsistencies between the standards for the various conditions were suggested and it was agreed that further revision would continue.

13. Cases for Discussion

Seven individual cases were discussed at the meeting. The conditions represented were arterio-venous malformations, cavernomas, meningioma, head injury with loss of consciousness, and loss of awareness.

14. Research Update

A list of the relevant DfT research projects was provided to the Panel members.

15. New Reference Paper

The Panel noted the research papers which had been provided.

16. Retirement of Panel Members

The Panel discussed the best method of recruiting replacements for the 5 members who are due to leave the Panel in 2008. It was agreed that the addition of a specialist in cerebrovascular medicine would be invaluable.

17. Any Other Business

The Panel members noted with regret the death of Professor Bryan Jennett and wished to recognise his contribution to the field of neurosurgery.

18. Date and time of Next Meeting

The Panel was reminded that the Autumn meeting of the Neurology Panel will be at 1.00 pm on Thursday, 18 September 2008. The provisional dates for the 2009 meetings will be on 12 March and 1 October.

Meeting adjourned at 17.00 hours.

DR J E MORGAN

Panel Secretary

Medical Adviser, DVLA

20 March 2008

ANNEXE 3.4.4

| | GROUP 1 | GROUP 2 |
|---|-----------------------|---|
| Significant head injury (e.g. brain contusion) without surgery | 6 months off driving. | Refusal or revocation. May be able to return to driving when the risk of seizure has fallen to no greater than 2% per annum, and with no debarring residual impairment likely to affect safe driving. |

ANNEXE 4.1

| COLLOID CYSTS | GROUP 1 | GROUP 2 |
|--|----------------|--|
| Asymptomatic and untreated | No restriction | No restriction unless prescribed prophylactic medication for seizures when there should be individual assessment. |
| Craniotomy and/or endoscopic treatment | 6 months off | Can drive 2 years after treatment, provided there is no debarring residual impairment likely to affect safe driving. |

ANNEXE 4.2

| CAVERNOUS MALFORMATIONS | GROUP 1 | GROUP 2 |
|--|--|---|
| <p>Infratentorial</p> <ul style="list-style-type: none"> • Incidental • With focal neurological deficit or haemorrhage • Treated by surgical excision (craniotomy) | <p>No restriction</p> <p>Can drive when there is no debarring residual impairment likely to affect safe driving</p> <p>As above</p> | <p>No restriction</p> <p>Can drive when there is no debarring residual impairment likely to affect safe driving.</p> <p>As above</p> |
| <p>Supratentorial</p> <ul style="list-style-type: none"> • Incidental • Seizure, no surgical treatment • Haemorrhage and/or focal neurological deficit, no surgical treatment • Treated by surgical excision (craniotomy) | <p>No restriction</p> <p>Epilepsy Regulations</p> <p>Can drive when there is no debarring residual impairment likely to affect safe driving</p> <p>6 months off ; can drive when there is no debarring residual impairment likely to affect safe driving</p> | <p>No restriction</p> <p>Epilepsy Regulations</p> <p>Permanently revoke/refuse</p> <p>Revoke/refuse until 10 years post-obliteration of the lesion and Epilepsy Regulations apply</p> |
| <p>NB.</p> <ul style="list-style-type: none"> - Radio-surgery for a cavernous malformation equates to an untreated lesion for the time being. - Multiple cavernoma: no firm evidence of ↑ morbidity. - Size is not an issue. | | |

| INFRATENTORIAL AVMs | GROUP 1 | GROUP 2 |
|--|--|---|
| <p>Intracranial haemorrhage due to AVM:</p> <p>a) Embolisation/stereotactic radiotherapy</p> <p>b) Treated by craniotomy</p> <p>c) No treatment</p> | <p>Can drive when there is no debarring residual impairment likely to affect safe driving.</p> <p>As above.</p> <p>As above.</p> | <p>Refusal/revocation. Non-review licence on confirmation of complete obliteration with no debarring residual impairment likely to affect safe driving.</p> <p>As above.</p> <p>Permanent refusal/revocation.</p> |
| <p>Incidental finding of an infratentorial AVM</p> <p>a) No treatment</p> <p>b) Surgical or other treatment.</p> | <p>Retain.</p> <p>Can drive when there is no debarring residual impairment likely to affect safe driving.</p> | <p>Individual assessment.</p> <p>Refusal/revocation. Non-review licence on confirmation of complete obliteration with no debarring residual impairment likely to affect safe driving.</p> |

| SUPRAENTORIAL AVMS | GROUP 1 | GROUP 2 |
|---|--|--|
| <p>Intracranial haemorrhage due to supratentorial AVM:</p> <p>a) Craniotomy</p> <p>b) Other treatment (embolisation or stereotactic radiotherapy).</p> <p>c) No treatment.</p> | <p>6 months off driving; can be re-licensed when there is no debarring residual impairment likely to affect safe driving.</p> <p>One month off driving; can drive when there is no debarring residual impairment likely to affect safe driving.</p> <p>As above.</p> | <p>Refusal or revocation until lesion is completely removed or ablated and 10 years seizure- free from last definitive treatment. There must be no debarring residual impairment likely to affect safe driving.</p> <p>As above.</p> <p>Permanent refusal or revocation.</p> |
| <p>Incidental finding of a supratentorial AVM (no history of intracranial bleed)</p> <p>a) No treatment.</p> <p>b) Surgical or other treatment.</p> | <p>Retain.</p> <p>See above: as for AVM with intracranial haemorrhage.</p> | <p>Permanent refusal or revocation.</p> <p>Refusal or revocation until lesion is completely removed or ablated and 10 years seizure- free from last definitive treatment. There must be no debarring residual impairment likely to affect safe driving.</p> |

ANNEXE 4.3

| | GROUP 1 | GROUP 2 |
|--|---|---|
| <p>CEREBROVASCULAR DISEASE including stroke due to occlusive vascular disease, spontaneous intracerebral haemorrhage, TIA and amaurosis fugax</p> | <p>Must not drive for at least one month. May resume driving after this period if there is no debarring residual impairment likely to affect safe driving. There is no need to notify the DVLA unless there is residual impairment 1 month after the episode, in particular, visual field defects, cognitive impairment or impaired limb function. Minor limb weakness alone will not require notification unless restriction to certain types of vehicle or vehicles with adapted controls is needed. Adaptations may be able to overcome severe physical impairment (See Appendices <u>1</u> & <u>2</u> on pages <u>41</u> & <u>42</u>).</p> <p>A driver experiencing multiple TIAs over a short period may require at least 3 months free from further attacks before resuming driving and should notify DVLA.</p> <p>Epileptic attacks occurring at the time of a stroke/TIA or in the ensuing 24 hours may be treated as provoked for licensing purposes in the absence of any previous seizure history or previous cerebral pathology.</p> <p>Seizures occurring at the time of cortical vein thrombosis require at least 6 months free from attacks before resuming driving.</p> | <p>Licence refused or revoked for at least one year following a stroke or TIA. Can be considered for licensing after this period if there is no debarring residual impairment likely to affect safe driving and there are no other significant risk factors. Licensing will also be subject to satisfactory medical reports including exercise ECG testing.</p> |

Important: These advisory notes represent the balanced judgement of the Secretary of State's Honorary Medical Advisory Panel as a whole. If they are quoted, they should be reproduced as such and not as the views of individual Panel members.

ANNEXE 10

| | GROUP 1 | GROUP 2 |
|--|---|------------------------|
| Insertion or revision of upper end of ventricular shunt or extra-ventricular drain | 6 months off; can then be re-licensed when there is no debarring residual impairment likely to affect safe driving | Individual assessment. |
| Neuroendoscopic procedures, eg. ventriculostomy | 6 months off; can then be re-licensed when there is no debarring residual impairment likely to affect safe driving. | Individual assessment. |