

# MINUTES OF THE SECRETARY OF STATE FOR TRANSPORT'S HONORARY MEDICAL ADVISORY PANEL ON DRIVING AND DISORDERS OF THE CARDIOVASCULAR SYSTEM Meeting held on Thursday 11<sup>th</sup> March 2021 10:00 am

#### Present:

#### **Panel Members:**

Dr Robert Henderson (Chair) Dr Leisa J Freeman Mr Andrew Goodwin Dr Sern Lim Dr Shahid Aziz Dr Kim Rajappan Mr Amar Vara (Lay member) Mrs Linda Samuels (Lay member)

#### **OBSERVERS:**

Dr Sally Bell Dr John McVicker Dr E Hutchinson Dr Derek Crinion

#### **Ex-officio:**

Dr Cathy Armstrong Dr Elliot King Dr Jeannette Lynch Mrs Helen Harris Miss Gwen Owen Miss Keya Nicholas Mr Jason Donovan Mrs Sharon Abbott Mrs Suzanne Richards Miss Kirsty-Leigh Van Staden Mrs Siân Taylor Maritime and Coastguard Agency Occupational Health Service, Northern Ireland Civil Aviation Authority National Programme Office for Traffic Medicine, Ireland

Deputy Senior DVLA Doctor DVLA Doctor DVLA Doctor Driver Medical Licensing Policy Driver Medical Licensing Policy Driver Medical Licensing Policy Lead Head of Driver Licensing Policy Drivers Medical Operational Delivery & Support Service Management DVLA Panel Support DVLA Note-taker/Panel Coordinator



Driver & Vehicle Licensing Agency

### SECTION A: INTRODUCTION

#### 1. Apologies for Absence

Apologies were received from, Dr Edward Keelan Dr Nick Jenkins Dr Douglas Fraser

#### 2. CHAIR'S REMARKS

The Chair welcomed all attendees and introduced one new member, Mrs Linda Samuels, who has recently been appointed as a lay member. The Chair also introduced Dr Cathy Armstrong, the Deputy Senior DVLA Doctor. The Chair advised attendees regarding the etiquette of digital meetings and reminded members to ensure their declarations of interest were up to date.

#### 3. ACTIONS FROM PREVIOUS MEETING

The Chair discussed the actions from the last meeting:

#### i. Takotsubo Cardiomyopathy

The standard for Takutsubo Cardiomyopathy was agreed in the Autumn 2020 meeting and has been incorporated into latest edition of the Assessing Fitness To Drive (AFTD) guidance for clinicians, under the Acute Coronary Syndrome section. Panel agreed they were pleased with the changes.

#### ii. Marfan syndrome and other inherited aortopathies

The wording of the medical standard was amended slightly in the Autumn 2020 meeting and has been incorporated into the AFTD guidance. Panel agreed they would like to have further discussions regarding Marfan syndrome and review the rationale for debarring Group 2 drivers who have undergone emergency (as opposed to elective) aortic root surgery. Panel discussed that the difference may be due to complications of coronary artery reimplantation or the risk of dilatation of residual aorta after emergency surgery and agreed that previous panel minutes should be reviewed to inform future discussion.

#### iii. COVID-19 Related Cardiovascular complications and Myocarditis standards

Panel agreed that the medical standards for myocarditis should be reviewed at future meetings. Panel discussed and confirmed that any symptoms of long covid affecting the cardiovascular



system were already adequately covered by the AFTD guidance. The Chair queried if DVLA had received any cases with covid related issues, DVLA stated that while they have seen cases with symptoms believed to be associated with long covid over recent months, most of these cases have involved neurological symptoms rather than cardiac symptoms. The Chair advised that this action will be kept open for review in the next panel meeting.

### iv. Provoked Seizures

In Autumn 2020 panel agreed that provoked seizures secondary to a cardiac cause should be renamed to "Convulsive Syncope due to Cardiovascular Cause". The wording has been clarified and amended in the AFTD guidance.

DVLA advised that the neurology medical advisory panel recently discussed convulsive syncope of cardiovascular cause and agreed that if an event was truly a seizure, then the provoked seizure standard should apply, but that if the event is merely myoclonic jerking then the syncope standard would apply. Panel agreed that this definition would need to be incorporated into the planned revision of the syncope section in AFTD guidance.

### v. Hypertrophic Cardiomyopathy

The wording of the Group 2 standard for drivers with hypertrophic cardiomyopathy has been amended in the AFTD guidance. Previously the medical standard required a specified rise in blood pressure during an exercise test. The standard no longer requires this blood pressure response but requires completion of the full nine minutes of the Bruce exercise treadmill protocol. If the individual is unable to complete a functional exercise test, then an alternative would be to undertake an MRI scan to assess the extent of gadolinium enhancement. Panel discussed the changes and noted that Appendix C in the AFTD guidance refers to ST segment changes on the electrocardiogram that may not apply to drivers with hypertrophic cardiomyopathy. Panel agreed to review previous panel minutes where functional testing in drivers with hypertrophic cardiomyopathy was discussed, and then consider whether further clarification of the standards and Appendix C are needed.

### vi. Pulmonary Hypertension

Following recent panel member discussions, the heading for "Pulmonary Hypertension" in the AFTD guidance has been changed to "Pulmonary Arterial Hypertension". Panel discussed the requirement to specify "under the care of a specialist centre". Panel agreed that specialist targeted treatment for pulmonary arterial hypertension is only available at a specialist centre so by definition, any driver who is being appropriately treated will be under the care of a specialist centre. There was unanimous agreement amongst the Panel that these patients are very unlikely to be managed in secondary or tertiary care outside of a pulmonary hypertension clinic. Panel advised that no change to the guidance is required.



### SECTION B: TOPICS FOR DISCUSSION

### 4. Syncope

Dr Kim Rajappan gave a presentation at the Autumn 2020 meeting on syncope with a view to a future update of the standards for Transient Loss of Consciousness (blackouts). The panel at the time discussed the possible structure of such an amended standard. Dr Rajappan agreed to prepare a thorough assessment of the evidence and distribute this in April before an extraordinary sub-panel meeting in May/June to progress the proposed review of standards for syncope.

### 5. <u>ICD</u>

### i. Combined ICD/pacemaker systems

DVLA requested panel advice regarding future pacemaker implants and the possibility of pacemakers being combined pacemaker/ICD units with potential implications for Group 2 licensing.

Panel confirmed that for Group1 drivers, if the pacemaker is active and the ICD is off, DVLA should apply the pacemaker standards. However, if Group 2 drivers have an ICD implant (even if it is deactivated) it is debarring for licensing purposes.

Panel advised that the majority of ICDs have pacemaker capability, but pacemakers would not have ICD capability. Panel were concerned about barring a group 2 driver who had an ICD implanted which is deactivated to leave only the pacemaker function. However due to the low percentage of cases this would apply to, a panel member opinion would be appropriate.

### ii. Idiopathic ventricular fibrillation

Panel were asked to consider whether recent academic articles and the case of a Group 1 driver with idiopathic ventricular fibrillation have implications for current arrhythmia guidance. Panel advised that patients with idiopathic ventricular fibrillation should be allowed to drive if their risk of sudden disabling event is less than 20% per annum for Group 1 drivers and less than 2% for Group 2 drivers. Panel agreed that current arrhythmia guidance does not need to be revised.

### 6. Aortic Dissection

DVLA requested clarification of the medical standards regarding aortic dissection and asked the panel if the current standards require amendment.

Mr Andrew Goodwin provided panel with an interesting and comprehensive review of the current data regarding aortic dissection.



Patients with a diagnosis of acute aortic dissection are admitted to hospital and would not be driving, so AFTD guidance concerns patients who survive to discharge from hospital (chronic aortic dissection). Mr Goodwin also noted that patients with type A dissection who are managed medically are at extremely high risk of aortic rupture and death and would be ineligible for both Group 1 and 2 licensing. Current AFTD guidance on chronic aortic dissection therefore relates to patients with type A dissection who have had surgical repair and to patients with type B dissection who have had TEVAR or been managed medically. Mr Goodwin identified three areas of controversy:

- i. persistence of the false lumen
- ii. aortic diameter (including the false lumen)
- iii. long-term management of blood pressure

Mr Goodwin presented data from a recent meta-analysis of 11 studies of patients with type A dissection who were managed surgically. Patients who survived to hospital discharge had a 5-year survival of 37%-91% (equivalent to 2%-12.6% annual mortality, assuming a linear event rate). In another meta-analysis of studies on type B dissection 5-year mortality was approximately 60% (equivalent to 8%-9% annual mortality, assuming a linear event rate). The hazard of mortality was approximately doubled in patients with a patent or partially thrombosed false lumen for both type A and type B dissection.

Data on the impact of aortic diameter on risk mainly relate to patients with aortic aneurysm, not to patients with aortic dissection. The available data suggest a marked increase in risk of adverse cardiovascular events above an aortic diameter of 6.0cm but the event rate specifically in patients with aortic dissection and an aortic diameter of 5.0-5.9cm approximates to 3% per annum.

Information on the impact of blood pressure control on outcome in patients with aortic dissection is limited. Nevertheless, an international registry provides evidence that blood pressure control is associated with lower mortality in chronic aortic dissection and control of blood pressure is recommended by guidelines.

The Chair thanked Mr Goodwin for his presentation. Panel discussed the presentation and agreed that current AFTD guidance for Group 1 driving for patients with chronic aortic dissection is generally appropriate. Event rates in patients with chronic aortic dissection and a patent or partially thrombosed false lumen are likely to exceed 2% per annum, which would disbar all such patients from Group 2 driving. In addition, patients with an aortic diameter above 5cm are now recognized to be at increased risk (>2% per annum) and panel advised that current AFTD guidance should be amended to include a threshold aortic diameter for Group 2 licensing of 5.0cm (currently 5.5cm). Panel also considered that all drivers with chronic aortic dissection should be under regular medical follow-up and should have satisfactory control of blood pressure.



The discussion about the impact of aortic diameter and risk will also need to be reflected in the standards for bicuspid aortopathy and aortic aneurysm. Panel advised they would like to develop appropriate revisions for all of these sections in AFTD. Regarding the current wording of the chronic aortic dissection section, panel advised that 'in place' should be removed from the requirement for medical follow up in the group 2 wording and 'thrombosed segment' should be removed from the group 2 wording - *maximum transverse diameter of the aorta is less than 5.5cm (including the false lumen/thrombosed segment*).

## SECTION C: ONGOING AGENDA ITEMS

### 7. Tests, horizon scanning, research and literature

Panel members were reminded that the terms and conditions of panel membership require members update panel about any information/tests/research that could impact on the medical standards or existing DVLA operational processes.

No new items for discussion were raised.

### 8. <u>AOB</u>

The Chair discussed future panel membership. DVLA formally congratulated Dr Henderson on his appointment to Panel Chair. The upcoming recruitment scheme for panel members was also discussed.

### 9. Date and time of next meeting

Thursday 7<sup>th</sup> October 2021

Original draft minutes prepared by:

Sian Taylor Note Taker Date: 12<sup>th</sup> March 2021

Final minutes signed off by:

Dr R Henderson Panel Chair Date: 10<sup>th</sup> May 2021



THE DVLA WILL CONSIDER THE ADVICE PROVIDED BY THE PANEL AND NO CHANGES TO STANDARDS WILL TAKE EFFECT UNTIL THE IMPACT ON INDIVIDUALS AND ROAD SAFETY IS FULLY ASSESSED

