Who can drive home from the emergency department? A questionnaire based study of emergency physicians’ knowledge of DVLA guidelines

A Frampton

Objective: To determine whether doctors working in emergency departments are aware of which of the common conditions seen have driving restrictions associated with them and whether they routinely advise patients of these restrictions.

Methods: 200 questionnaires were distributed to all grades of doctor currently working in 15 emergency departments in Wessex and the south west. The survey was anonymous so follow up of non-responders was not possible. Doctors were asked to indicate which of the 20 commonly seen conditions had DVLA guidelines restricting driving activity at least temporarily, and in which of these conditions they actually advised patients appropriately about their driving. In addition the MDU, GMC, and the Department of Transport web site were contacted to establish what they considered to be good medical practice regarding issuing advice about driving.

Results: 102 doctors (51%) responded to the survey. Knowledge regarding restrictions for various conditions varied, with 87.5% responding correctly about a first fit to only 7.8% regarding a collapse query cause. With regard to advising patients, 79.4% of doctors responding said that they routinely advised patients about stopping driving after a first fit, 32% advised patients after a single transient ischaemic attack, and only 7% after a collapse query cause.

Conclusions: Doctors working in emergency departments are aware of conditions that lead to an inpatient admission that have driving restrictions. However, knowledge of conditions where patients are likely to be discharged was not as complete and advice was less likely to be given to patients. Emergency department doctors need to be more aware of restrictions that apply to conditions where patients are to be discharged.

Driving is an inherently dangerous activity associated with significant mortality and morbidity, leading to 3500 deaths and 40,000 serious injuries from road traffic accidents in the UK each year. The road traffic act 1988, section 92–94, deals with a person’s fitness to hold and/or continue to hold entitlement to drive various categories of vehicles. Medical standards, set by the Department of Transport’s medical advisory panels, are used by the medical advisers to the DVLA to decide whether a person is fit or unfit to hold a licence. These standards are published by the DVLA and guidelines issued to departments in Wessex and the south west. The questionnaire was anonymous so follow up of non-responders was not possible. Doctors were requested to fill in the questionnaire without reference to the currently published guidelines.

Methods

Two hundred questionnaires were sent to emergency physicians currently working in 15 emergency departments in Wessex and the south west. The questionnaire was comprised of two questions. The first asked doctors to indicate which of 20 listed conditions that are commonly seen in the emergency department had restrictions according to current DVLA guidelines. The second question asked doctors to indicate in which of the same 20 conditions, if any, they routinely informed patients of the appropriate restrictions. The survey was anonymous so it was not possible to contact non-responders, however a reply paid envelope was included with every questionnaire to encourage as many people to respond as possible.

Results

In total 102 doctors (51%) replied to the questionnaire; 16 consultants, 16 specialist registrars, 20 staff grades, 41 SHOs, and 9 clinical fellows. The length of experience in emergency medicine ranged from less than six months to greater than 10 years. When analysing the replies, the conditions were split into four groups—neurological conditions, collapse query...
cause, cardiovascular conditions, and psychiatric/drug and alcohol related conditions. The results were as follows:

(1) Neurological conditions (fig 1). Overall 87.5% of doctors were aware that restrictions applied to patients presenting with a first fit. However, when asked about a single TIA, a condition also likely to result in discharge and outpatient follow up if completely resolved, the overall percentage was only 51.9%, with the awareness amongst SHOs, clinical fellows and staff grades nearer 40%. Some 87.2% of doctors were aware that multiple TIAs were associated with restrictions and almost all were aware that straightforward vasovagal attacks carry no restriction to driving.

(2) Collapse query cause (fig 2). Knowledge of driving restrictions in this group of patients was poorer. When presenting with a loss of consciousness or altered awareness, likely to be unexplained syncope and with a low risk of recurrence (normal cardiovascular and neurological examination and normal ECG), patients should abstain from driving for four weeks and inform the DVLA. Only 7.8% of doctors in this survey were aware that there were any restrictions, with knowledge particularly poor among SHOs, staff grades and clinical fellows who are likely to see most of these patients. Patients who present with loss of consciousness or altered awareness, probably unexplained syncope but with a high risk of recurrence (abnormal ECG, clinical evidence of structural heart disease, syncope while lying or sitting or >1 episode in six months) are required to inform the DVLA. If a cause is identified and treated driving can begin after four weeks, however if no cause is found then driving is not permitted for six months. In this survey 44.6% of doctors were aware that restrictions applied to these two groups.

(3) Cardiovascular disease (fig 3). Of the conditions listed in this category, only unstable angina and myocardial infarction had any restrictions, both of these conditions will lead to admission and inpatient assessment. Overall 56.8% of doctors responded correctly to unstable angina, and 78.4% to myocardial infarction.

(4) Psychiatric conditions/alcohol dependency/drug misuse (fig 4). Overall 38.2% of the doctors who responded to the survey were aware that there were driving restrictions that applied to patients with severe depression. Some 55.9% gave the correct answer for acute psychosis, 53.9% gave the correct answer to alcohol dependency, 28.4% for persistent use of cannabis, 43.4% for heroin use, and 42% for benzodiazepine dependency.

The number of doctors who routinely explain relevant restrictions to patients was also studied (fig 5). Some doctors commented that for various conditions patients were likely to be admitted and it was therefore the responsibility of the admitting team to advise on driving. Similarly, some of the more chronic conditions such as alcohol and drug dependence may be more appropriately addressed by the patients’ GP. However, it was considered important that emergency
physicians should advise patients who present with conditions that have restrictions but who may be discharged from the department, for example; first fit, single TIA, and collapse query cause. (See table 1 for a summary of the guidelines for these conditions). Overall 79.4% of respondents informed patients of driving restrictions following a first fit. Only 32% reported advising patients after a single TIA, 7% advised patients after a collapse with low risk of recurrence, 31% after a collapse with high risk of recurrence, and 14.7% after a collapse where the cause had been identified and treated.

DISCUSSION

The 51% response rate to this study was better than that achieved in previous similar undertakings, previous response rates have been around 30%.

Those who failed to respond could not be followed up because of the anonymous nature of the survey. There are numerous reasons why doctors may not respond, however as knowledge of the correct responses probably increases the incentive to respond, it is probable that those who failed to respond had less knowledge than those who did reply.

Conditions with no restriction to driving were intentionally included in the questionnaire to prevent doctors simply ticking each condition, however it is possible that this survey over-estimated knowledge. Firstly, it was not possible to determine whether anyone had consulted the DVLA web site or guidelines before attempting the survey, although, by making the survey anonymous, it was hoped that this would be avoided. Secondly, doctors may have guessed that conditions had restrictions associated, particularly as no details of restrictions were required.

Medical conditions probably play a part in causing major road accidents in less than 1% of cases. However, the literature on chronic illness and their contribution to road traffic accidents is conflicting. Waller concludes that drivers with diabetes, epilepsy, cardiovascular disease, mental disorders, and alcoholism averaged twice as many accidents per 1 000 000 miles of driving as a control group. His group of patients contained a large proportion of people with epilepsy. Ysander by contrast, in a study of drivers with chronic disease (mainly diabetes, cerebrovascular disease and renal disease) found that the percentage of accidents in the disease group was half that of the control group. The National Highway Traffic safety administration in Utah undertook a study looking at the same question. They found that when viewed as a group, drivers who were licensed with medical conditions had higher risks for crashes, violations and at fault crashes than the comparison group. Grattan and Jeffcoate found that 1.5 minor or serious injury accidents per 1000 were attributable to sudden illness of the driver or rider.

Irvine suggested that when assessing a person’s fitness to drive there are three key questions that should be asked, these are:

**Figure 3** Doctors (%) giving the correct answer to cardiological conditions.

**Figure 4** Doctors (%) giving the correct response to various psychiatric and drug and alcohol related. Sev dep, severe depression; psy, acute psychoses; alc, alcohol.
Is there significant evidence of a cortical impairment (for example, dementia, post-CVA, alcohol or drug misuse) such that a person is likely to be a source of danger at the wheel?

Is the person liable to sudden or disabling episodes of collapse, altered awareness, loss of consciousness or visual disturbance from whatever medical cause (such as sudden hypoglycaemia, epilepsy, cardiac arrhythmia, or Menieres disease)?

Does the person have an inadequate standard of vision?

If the answer is yes to any of these questions, the correct advice, which should be recorded in the notes, is for patients to:

- Stop driving
- Notify the DVLA
- Notify their motor insurer

Section 94(1) of the road traffic act 1988 places a duty upon the holder of a driving licence to inform the relevant authority if at any time during the currency of the licence he suffers from a relevant or progressive disability. Under section 92(1), the definition of “relevant disability” includes any disability that is likely to cause the holder of the licence to be a source of danger to the public when driving a vehicle. Although the prime responsibility for informing the authorities lies with the patients, physicians have a duty of care to society that overrides right to confidentiality when the patient cannot or will not conform. Ultimate responsibility lies with the physician who knows the diagnosis.

Doctors, who omit to advise patients appropriately, may be open to legal action. Thus if a medical practitioner fails to advise a motorist that they are unfit to drive because of a disability, they could be responsible for any injuries that occur as a result.

### Table 1 DVLA restrictions to driving for common conditions discharged from the emergency department

<table>
<thead>
<tr>
<th>Condition</th>
<th>Group 1 entitlement</th>
<th>Group 2 entitlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>First epileptic seizure/solitary fit</td>
<td>One year off driving with medical review before restarting driving</td>
<td>After a first unprovoked seizure, drivers must demonstrate 10 years freedom from further seizures, without anticonvulsant medication in that time</td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
<td>Muscle not to drive for at least one month. May resume driving after this time if recovery is satisfactory.</td>
<td>Recommended refusal/revocation for at least 12 months after a stroke or TIA.</td>
</tr>
<tr>
<td>Loss of consciousness/loss or altered awareness likely to be unexplained</td>
<td>Can drive four weeks after the event</td>
<td>Can drive three months after the event</td>
</tr>
<tr>
<td>syncope and low risk of recurrence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of consciousness/loss or altered awareness likely to be unexplained</td>
<td>Can drive four weeks after the event if the cause has been identified and treated if no cause identified then require six months off</td>
<td>Can drive three months after the event if the cause has been identified and treated. If no cause identified, then licence refused/revoked for one year</td>
</tr>
</tbody>
</table>

Figure 5 Doctors (%) routinely advising patients regarding restriction associated with conditions where patients are likely to be discharged from the emergency department. 1, First fit; 2, single TIA; 3, collapse?cause (low risk of recurrence); 4, collapse?cause (high risk of recurrence; 5, collapse, cause found and treated.
condition known to the medical practitioner, it is likely that
the medical practitioner would be guilty of negligence in their
duty of care. They would therefore be liable for any harm
arising as a consequence of their negligence and could be
sued on that basis. In a case cited by the DVLA a GP failed to
advise his patient who had recently suffered from a TIA to
stop driving and inform the DVLA and his insurance
company. The patient had a serious accident involving
several vehicles, and the insurance company failed to
compensate on the grounds that his insurance was null and
void because of his previous TIA. The GP was therefore
responsible as he had failed to give his patient necessary
advice and was subsequently prosecuted. In such circum-
stances it is up to the court to decide on liability and the
amount of any compensation that might be due. One
potential mistake is to assume that the patient drives only
a car, and to base the advice on that. This study has not
concentrated on drivers of HGVs or public transport,
however, more stringent rules apply in these cases and
should not be overlooked.

Anecdotally the cases in which the MDU have become
involved usually involve GPs as they are traditionally in the
best position to advise patients (direct communication from
the MDU). However, in the case of conditions with short
driving restrictions of only weeks or a few months it is
possible that patients seen in the emergency department may
not have any contact with their GP within the period of the
restriction. The MDU were aware of a number of cases where
insurers had failed to pay out because they felt the patient
should have been advised not to drive by the doctor attending
to them.

On the whole emergency physicians were aware of the
restrictions for most serious illnesses that required hospital
admission. While it is essential to be aware that these
conditions will result in a restriction in driving activity, this
advice is probably best left to the admitting teams rather than
bombarding patients with information on admission. Of note
however was the lack of awareness of restrictions associated
with conditions where patients were likely to be discharged
from the emergency department. These patients by definition
are likely to have fully recovered from the initial event by the
time of discharge and are more likely to continue to drive. It
is this group that emergency physicians need to be aware of
and advise them accordingly.

REFERENCES
2 Department of the Environment, Transport and the Regions. Tomorrow’s
roads: safer for everyone. The government’s road safety strategy and casualty
target for 2010. 1.1 Road accidents. http://www.roads.detr.gov.uk/
4 Irvine R. The driver, the doctor and the law. Postgrad Med J
1994; 238:668–74.
5 King D, Barlow S, Barrett J. The law and medical fitness to drive—a study of
6 MacMahon M, O’Neill D, Kenny R. Syncope: driving advice is frequently
7 Kelly R, Warke T, Steele I. Medical restrictions to driving: the awareness of
8 Waller J. Chronic medical conditions and traffic safety. A review of the
9 Ysander L. The safety of drivers with chronic diseases. Br J Ind Med
10 Harris S, Jolly B, Runge J, et al. Medical conditions and driver crash
11 Gratten E, Jeffcoat G. Medical factors and road accidents. BMJ
13 DVLA. DVLA guidelines at a glance. http://www.dvlagov.uk/at_a_glance
(accessed 1 Dec 2002).