Driving after stroke: assessing the safety

Considering its immense social and medico-legal importance, all stroke patients should receive accurate advice regarding driving. An audit in a district general hospital revealed the deficiencies in recording and advising stroke patients in this regard. Drs Shubharata Biswas, Laxmi Radhakrishnan and Suryabrata Banerjee with Professor Mohan Datta-Chaudhuri discuss how the stroke management team should record driving history and provide necessary advice.

An acute neurological insult like stroke can leave a patient with serious deficits incompatible with driving. However, modern multidisciplinary stroke management is often successful in helping people return to driving with or without adaptations in the car. It is therefore very important for medical and allied health professionals to provide necessary guidance to patients who wish to continue driving following recovery from stroke. Hospital staff have often been noted to fail to inform some stroke patients about what they should do before they return to driving. Hospital staff may give incomplete, inaccurate and conflicting information.

The Driver and Vehicle Licensing Authority (DVLA) has given specific guidelines in this respect:

- Group 1 (cars) must not drive for at least one month after stroke or transient ischaemic attack (TIA);
- Group 2 (lorries and buses) must not drive for at least one year after stroke or TIA;
- All patients must seek medical permission before they commence driving, and if neurological deficit persists then the patient needs to inform the DVLA.

Assessment should be made at the end of a month (for Group 1 drivers) or one year (for Group 2 drivers) for any residual neurological deficit and, in the absence of this, the patient may resume driving. There is no guideline from the DVLA on whether this permission has to be a written one, however the authors would strongly recommend that this permission is recorded in the clinical notes. If a neurological deficit is present after a month/a year of the cerebrovascular event it is then that it needs to be reported to the DVLA. The DVLA usually will ask the GP or consultant dealing with the patient to complete a medical certificate based on a structured questionnaire with specific notes on cognitive ability, visual and motor functions. Health professionals need to be aware of these guidelines so that patients receive adequate and accurate information.

The Royal College of Physicians also has clearly given its guideline. It states: ‘Patients who used to drive before their stroke must be given accurate and up-to-date advice on their responsibilities; they should be assessed for any absolute contraindications, for their cognitive ability to drive safely, their motor ability to drive a car and their need for adaptations.’

Based on these recommendations and guidelines, standards can be set that every stroke patient should have:

- driving history recorded on admission;
Key points

> Medical and allied healthcare professionals should work in a co-ordinated way to improve provision of guidance to stroke patients who wish to continue to drive.

> Driving history should be recorded in medical notes.

> All stroke patients should receive information about driving along with other lifestyle advice.

> The stroke clinic review should include driving status and advice regarding it.

> driving advice given as inpatient or at discharge;
> outpatient review in post-stroke patients should include driving status and advice regarding driving.

The audit

The authors led an audit in Stepping Hill Hospital, Stockport, Cheshire. The objective was to measure compliance against the three standards above.

Methods

A retrospective audit was performed on patients with stroke/TIA admitted or discharged from Stepping Hill Hospital between 30 April, 2004 and 30 August, 2004. Sources of data included medical and occupational therapy records, and telephone interviews. The population (158 patients) was comprised of inpatients admitted or discharged during this period. The study included those admitted in the Integrated Stroke Unit as well as those admitted in non-stroke wards. Of the 158 patients, 68 were males and 90 females; the age range was 28–96 years. Patients who were bed-bound prior to stroke or had conditions like blindness were excluded from further analysis as their premorbid conditions were good reasons for the driving history not being recorded. There were 37 such patients.
Results
Among the remaining 121 patients studied, 32 (26.44 per cent) were drivers, 58 (47.93 per cent) were non-drivers and driving history was never recorded in the rest of the 31 patients (25.6 per cent). Only two patients had their driving status recorded in the Medical Admission Unit clerking proforma. Fifty-seven had their driving history recorded in occupational therapy notes and driving advice was given to them. In others, the driving history was noted and driving advice was given as recorded in subsequent medical notes, including in follow-up clinics. It was also noted that the Medical Admissions Unit clerking proforma did not bear any such prompts to record driving history as there were for recording history of, for example, smoking, alcohol intake and allergies.

Stroke vs non-stroke units
Eighty-nine per cent of patients admitted in stroke units had their driving history recorded and post-stroke driving advice given as compared with 55 per cent of those admitted in non-stroke units (wards plus clinics). The audit highlighted the poor performance in recording driving history by hospital staff including doctors, occupational therapists and nurses. In what appears to be a re-affirmation of the manifold benefits of management of stroke in a specialised integrated stroke unit, the unit performed better in recording driving history and in giving advice as inpatient or on discharge, compared to non-stroke units.

Changes and forward plan
Driving history is now included routinely in the initial clerking proforma in the Medical Admissions Unit. Further audit is in progress to check any improvement as a result of this change. The audit and its results were accepted for presentation in the British Association of Stroke Physicians Conference in February 2006, where it was well received. Following the suggestions of the audience we are now conducting a survey among General Practitioners of Stockport and High Peak regions, which intends to find out about the degree of awareness and services provided in issues involving driving and stroke.

Conflict of interest: none declared.

References
2. Driver and Vehicle Licesnsing Authority (2000). For Medical Practitioners: At a glance guide to the current medical standards of Fitness to Drive. Driver and Vehicle Licensing authority, Swansea