## Recommendations for stroke in 2010: a challenging agenda

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he management of stroke is complex, and even specialists in the area are unlikely to be acquainted with all of the relevant literature. The Canadian Best Practice Recommendations for Stroke Care<sup>1</sup> have been developed with rigour, meet international standards for quality and deserve to be widely read and accepted. They are strengthened by the integration within the text of the implications of the recommendations for health care systems, as well as performance measures and detailed summaries of the supporting evidence.

Most of these recommendations are uncontroversial, but in many areas of stroke medicine, evidence for management is absent or weak. In these circumstances, the authors of the 2010 best practice recommendations have chosen to proffer advice based on the consensus of the development group. It is unfortunate, however, that they did not take this opportunity to encourage participation in research trials designed to address these uncertainties and perhaps even to list the areas that should be research priorities.

One key area where recommendations have changed since 2008 is the management of atrial fibrillation. In a recent Canadian study of a cohort of 597 patients admitted with ischemic stroke and with known atrial fibrillation, only 40% were receiving warfarin, whereas 30% were receiving antiplatelet drugs, and 29% were not taking any antithrombotic agent.2 The new recommendation is that all patients with atrial fibrillation, except those at very low risk of stroke, should be treated with anticoagulants as primary prevention. Furthermore, dabigatran, rather than warfarin, is recommended for patients meeting the inclusion criteria for the RE-LY (Randomized Evaluation of Long term anticoagulant therapY) trial.3 The new Canadian guideline is one of the first national guidelines to come out in favour of dabigatran, making this recommendation despite a lack of data on the long-term safety and efficacy of this drug.

The 2010 guideline recommends telemedicine systems for delivery of acute stroke care where there is no on-site access to specialist expertise. The recommendations concentrate on the need to ensure that medical assessment and decision-making are performed with rigour. Per-

haps not emphasized enough is the need for high-quality nursing supervision in local hospitals (i.e., nurses with sufficient experience and expertise to recognize the complications of thrombolysis in the hours after the telemedicine doctor has finished a consultation).

An often-neglected area of care is the palliation of people who will die from their stroke. The section of the guideline that addresses end-of-life care is therefore of particular value, recommending easy access to palliative care specialists and emphasizing the need for all members of the stroke team to have the communication skills and expertise to address the needs of these patients and their carers.

Prevention of venous thromboembolism is an area where there is considerable uncertainty as to the most effective intervention. It is also the area where readers of guidelines are most likely to receive conflicting advice, depending upon which guideline is chosen. Unfortunately, the 2010 guideline of the Canadian Stroke Strategy does not make life much easier. The recent CLOTS (Clots in Legs Or sTockings after Stroke) trials4.5 showed that compression stockings are of no value, a finding acknowledged in the new guideline. The Canadian group recommends that for "high-risk" patients, prophylaxis against venous thromboembolism should be started immediately, although the group fails to define what constitutes high risk and does not offer any evidence that this strategy is effective. The group also fails to specify what type of prophylaxis is recommended, apart from suggesting that low-molecular-weight heparin should be considered. This is an area where suggesting participation in clinical trials would perhaps have been the wisest advice.

## **Competing interests:**

Anthony Rudd participated in discussions leading to the 2010 Canadian Best Practice Recommendations for Stroke Care. He chaired the Acute Stroke and TIA Guidelines Development Group (2008 guideline) and the Quality Standards Development Group of the UK National Institute for Health and Clinical Excellence (NICE), as well as the National Clinical Guidelines for Stroke Working Party of the Royal College of Physicians of London (2000, 2004 and 2008 guidelines).

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## KEY POINTS

- The 2010 Canadian Best Practice Recommendations for Stroke Care are the most up-to-date guidelines currently available and cover all key areas of management.
- It is unlikely that any stroke service in Canada is delivering care that meets all of these standards.
- Everyone involved in stroke care should examine and improve their practice as necessary.
- Participation in high-quality stroke research should be encouraged in all care settings.

The recommendations for early supported discharge, which are based on both clinical and cost reasons, could, if widely implemented, have a major impact on care and might lead to a substantial shift of resources from the hospital setting to the community. More specifically, the guideline recommends that patients with stroke receive a minimum of three hours of task-specific therapy from an interprofessional team for a minimum of five days a week. If this recommendation is achieved for Canadian patients, then they will be considerably better served than their peers in the United Kingdom, where the introduction of a National Institute for Health and Clinical Excellence quality standard<sup>6</sup> of 45 minutes of therapy per day from each relevant specialty was met with disbelief from many staff, who considered it absurdly overambitious.

Publication of the 2010 update of the Canadian stroke guidelines is an important step in the work of the Canadian Stroke Strategy. Considerable effort will be needed to ensure that they are read, understood and accepted, not just by clinicians, but also by managers and commissioners of health care. No service can be expected to provide ideal care for all patients at all times, and

monitoring of the quality of stroke care through national audit is therefore essential. If real change is to be achieved, the most important audience to engage will be the general public, particularly patients themselves and their carers.

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