NICE guidance emphasises that early intervention improves outcomes for patients after they have had a stroke or transient ischaemic attack. Nerys Hairon reports

NICE has published new guidance on the diagnosis and early management of acute stroke and transient ischaemic attack (TIA) (NICE, 2008; Lomas, 2008). Key priorities are highlighted, such as rapid recognition of symptoms and diagnosis, ensuring people with acute stroke have access to specialist care and conducting a swallowing assessment. NICE recommends all patients with suspected stroke be admitted to an acute stroke unit as quickly as possible.

The Royal College of Physicians has also published the third edition of the National Clinical Guideline for Stroke (Intercollegiate Stroke Working Party, 2008). This incorporates the NICE (2008) guidance and also covers recovery and rehabilitation, secondary prevention and long-term care (see www.rcplondon.ac.uk for details). NICE says its guidance should also be read alongside the Department of Health’s (2007) national stroke strategy. The NICE guidance covers interventions in the acute stage of a stroke or TIA, which is mainly the first 48 hours after the onset of symptoms.

In the UK, the RCP National Sentinel Stroke Audits have recorded changes in acute care provision over the last 10 years. These show more patients are being treated in stroke units, increased evidence-based practice and reductions in mortality and length of hospital stay. The RCP’s audit for 2006 (Hoffman et al, 2007) reported advances over the last 10 years but also highlighted a number of key areas where improvements needed to be made. These included better management of urinary incontinence, quicker access to brain imaging, a greater focus on primary and secondary prevention, and improved care planning. NICE argues that evidence from research studies needs to be put into practice to improve patient outcomes.

BACKGROUND
NICE (2008) points out that stroke is a preventable and treatable disease. Evidence is building on more effective primary and secondary prevention strategies, improved recognition of those who are at highest risk and interventions that are effective soon after the onset of symptoms.

Stroke is a major cause of morbidity and mortality in the UK. In 1999, it accounted for over 56,000 deaths in England and Wales – this represents 11% of all deaths. While most people survive a first stroke, they often have significant morbidity. In England each year around 110,000 people have a first or recurrent stroke and another 20,000 have a TIA. Over 900,000 people in England are living with the effects of stroke and half of these depend on others for help with everyday activities.

RECOGNISING SYMPTOMS
NICE says there is evidence that rapid treatment improves outcome after stroke or TIA. It recommends that practitioners use a validated tool such as FAST (Face Arm Speech Test) outside hospital to screen for a diagnosis of stroke or TIA in people with sudden onset of neurological symptoms. Hypoglycaemia should be excluded as the cause of these symptoms in this group.

Patients admitted to A&E with a suspected stroke or TIA should have the diagnosis established quickly using a validated tool such as ROSIER (Recognition of Stroke in the Emergency Room). Healthcare professionals should assess people who have had a suspected TIA (that is, no neurological symptoms at the time of...
who have had a suspected TIA and are at features and duration of symptoms. Patients using a validated scoring system such as a subsequent stroke. This should be done assessment) as soon as possible for risk of possible but definitely within one week of PRINCIPLES OF ASSESSMENT

- Aspirin (300mg daily) started at once;
- Specialist assessment and investigation within 24 hours of symptom onset;
- Secondary prevention measures as soon as the diagnosis is confirmed.

Specialist assessment incorporates exclusion of stroke mimics, identifying vascular treatment and likely causes, and appropriate investigation and treatment.

Practitioners should treat those with crescendo TIA (two or more TIs in a week) as being at high risk of stroke even though they may have a low ABCD score (three or below). Patients with a suspected TIA and a lower risk of stroke (a low ABCD score) should be treated with aspirin and have secondary prevention measures introduced as with those patients at high risk (see above). They should have specialist assessment and investigation as soon as possible but definitely within one week of symptom onset. Patients who have had a TIA but present late (over one week after their last symptom has resolved) should be treated as at lower risk of stroke.

SPÉCIALIST CARE

NICE recommends that all patients with suspected stroke be admitted directly to a specialist acute stroke unit after initial assessment, either from the community or A&E. Practitioners should ensure that brain imaging is performed immediately for those with acute stroke if they have any of the following:

- Indications for thrombolysis or early anticoagulation treatment;
- A known bleeding tendency;
- A depressed level of consciousness (Glasgow Coma Score of below 13);
- Unexplained progressive or fluctuating symptoms;
- Papilloedema, neck stiffness or fever;
- Severe headache at onset of stroke symptoms.

This also applies to patients who are already receiving anticoagulant treatment. NICE defines ‘immediately’ as ‘ideally the next slot and definitely within one hour, whichever is sooner’.

For all patients with acute stroke without indications for immediate brain imaging, scanning should be performed as soon as possible (defined as within a maximum of 24 hours after symptom onset).

NUTRITION AND HYDRATION

This area is another key priority for implementation. NICE says many people with acute stroke are unable to swallow safely and may need supplemental hydration and nutrition. Nurses are vital in monitoring patients’ nutrition and hydration status.

On admission, patients with acute stroke should have their swallowing screened by a trained healthcare professional before being given oral food, fluid or medication. If this screening shows problems with swallowing, patients should have a specialist swallowing assessment — this should be undertaken preferably within 24 hours of admission and no later than 72 hours afterwards.

Healthcare professionals should ensure that patients in the following groups are re-assessed and considered for instrumental examination and referred for dietary advice:

- Those who require tube feeding or dietary modification for three days.
- Patients who are unable to take adequate nutrition and fluids orally should:
  - Receive tube feeding with a nasogastric tube within 24 hours of admission;
  - Be considered for a nasal bridle tube or gastrostomy if they cannot tolerate a nasogastric tube;
  - Be referred to a trained healthcare professional for detailed nutritional assessment, tailored advice and monitoring.

Healthcare professionals should screen all hospital inpatients on admission for malnutrition and risk of it, and inpatients should be re-screened weekly. Practitioners should be aware that dysphagia, poor oral health and reduced ability to self-feed will affect nutrition in patients with stroke. For further details on nutrition and hydration support, see the full guidance.

OTHER ISSUES

The NICE guidance also contains recommendations in the following areas: brain imaging in people who have had a suspected TIA or non-disabling stroke; drug treatments for patients with acute stroke (including thrombolysis); maintaining or restoring homeostasis; early mobilisation and optimum positioning in acute stroke (see box below); avoiding aspiration pneumonia; and surgery in acute stroke. For full details see www.nice.org.uk.

This guidance should help nurses to ensure rapid diagnosis and assessment of those with suspected stroke and TIA, and ensure prompt treatment and referral for both conditions.

Early mobilisation is a key element in acute stroke care. Sitting up will help to maintain oxygen saturation and reduce the likelihood of hypostatic pneumonia.

Healthcare professionals should mobilise patients with acute stroke as soon as possible (when their condition allows), as part of a management programme in specialist stroke units.

Patients should be helped to sit up as soon as possible (again, when their condition allows).

Source: NICE (2008)