

Nursing Concise Guide for Stroke

This concise guide contains the recommendations from the *National Clinical Guidelines for Stroke*, 2nd edition, 2004,¹ that have particular implications for nursing practice. They have been drawn together by members of the National Stroke Nursing Forum to enable nurses delivering stroke care to have ready access to the latest guidance. Capital letters in parentheses indicate grade of recommendations. Supporting evidence and more detailed guidance is available in the full guideline (available at www.rcplondon.ac.uk and available in print format¹).

Service organisation

- a Stroke services should be organised so that patients are admitted under the care of a specialist team for their acute care and rehabilitation (A).
- b Stroke services should have:
 - i A geographically identified unit as part of the inpatient service (A)
 - ii A co-ordinated multidisciplinary team that meets at least once a week for the interchange of information about individual patients (B)
 - iii Staff with specialist expertise in stroke and rehabilitation (B)
 - iv Educational programmes for staff, patients and carers (B)
 - v Agreed protocols for common problems (B)
 - vi Access to brain and vascular imaging services (B) [within 24 hours of event].
- c Neurovascular clinic for the rapid assessment of transient ischaemic attack (TIA) and minor stroke should be available (B).
- d Services for TIA should have rapid access to imaging for patients who need it (B).
- e Hospitals offering thrombolysis to patients after ischaemic stroke, outside of a trial, should only do so following specialist staff training and registration with the UK Safe Implementation of Thrombolysis in Stroke (SITS-MOST) programme (B).
- f Specialist stroke services should be available in the community as part of an integrated system of care to facilitate early supported discharge (A).
- g Specialist day hospital rehabilitation or specialist domiciliary rehabilitation can be offered to outpatients with equal effect (A).
- h All clinicians should be involved in audit of stroke care and use the results to plan service improvements (B).

Services for younger patients

- a Services must recognise the particular physical, psychological and social needs of younger patients with stroke (C). They should also be aware of the guidelines on management of stroke in childhood.²

Carers and families

- a The needs of the patient and carers should be considered from the outset in the following domains:
 - i Information provision (which should be available in a variety of languages and formats specific to patient impairments) (A)
 - ii Planning and decision making (A)
 - iii Professional support (eg psychosocial, health) (A).
- b Stroke services must be alert to the likely stress on carers, specifically recognising the stress associated with 'hidden' impairments such as cognitive loss, urinary incontinence, and irritability (B).
- c Information should be given to carers on the nature of stroke and its manifestations, and on relevant local and national services (A).

Core principles of care

Assessment

- a Clinicians should use assessments or measures appropriate to their needs (ie to help make a clinical decision) (D).
- b Where possible and available, clinicians should use assessments or measures that have been studied in terms of validity (appropriateness for the purpose) and reliability (extent of variability) (D).
- c A multidisciplinary assessment using a formal procedure or protocol should be undertaken and documented in the notes within five working days of admission (D).

- d The protocol should include assessment of the following in addition to those assessments completed within the first 24 hours of admission:
 - i Screening for cognitive impairment, using a validated clinical method (D)
 - ii Assessment for problems with communication (D)
 - iii Self-care (C).

Goals

- a Goals should be meaningful, challenging but achievable (B), and there should be both short- and long-term goals (D).
- b Goal setting should involve the patient (B), and the family if appropriate (D).
- c Goals should be set at the team level as well as at the level of an individual clinician (D).

Underlying approaches to rehabilitation

- a All members of the healthcare team should work together with the patient, carer and family, using a shared philosophy and common goals (B).
- b Patients should be given the opportunity to repeatedly practice functional skills and activities (A).
- c Healthcare workers should consider their knowledge, training, competence, health and physical capabilities before every manual handling procedure, taking into account the setting and the available equipment (B).

Palliative care

Stroke may cause a range of distressing symptoms that need to be managed, once it is felt that death is inevitable. These may include pain, depression, confusion & agitation, and problems with nutrition and hydration. The involvement of carers should also be

considered within palliative care decisions and support given to them during and after decisions have been made.

- a All staff providing palliative care for patients after stroke should be trained in the principles and practice of palliative care (D).
- b Stroke patients should have access to specialist palliative care expertise when needed (D).

Initial management of acute stroke

Stroke is a medical emergency. With active management in the initial hours after stroke onset ischaemic brain may be saved from infarction.

- a The patient should be assessed on admission for:
 - i Their risk of aspiration, using a validated 50ml water swallow screening tool, administered by an appropriately trained professional (B)
 - ii Their needs in relation to moving and handling (C)
 - iii Their risk of developing pressure sores (C)
 - iv Nutritional status, using a validated method, to be undertaken by appropriately trained personnel (B).
- b Monitoring in the acute phase should include: conscious level, blood pressure, pulse, heart rhythm, temperature, blood glucose, oxygen saturation and hydration (D).
- c Blood glucose, arterial oxygen concentration, hydration and temperature should be maintained within normal limits. Infection should be actively managed unless the patient is receiving palliative care (B).
- d Blood pressure should only be lowered in the acute phase where there are likely to be complications from hypertension, eg hypertensive encephalopathy, or aortic aneurysm with renal involvement (B).

- e Patients should be mobilised as soon as possible (B).
- f Aspirin (300 mg) should be given as soon as possible after the onset of stroke symptoms if a diagnosis of primary haemorrhage has been excluded [via CT or MR scanning]. In dysphagic patients aspirin should be given rectally or by enteral tube (A).
- g Aspirin should be delayed for 24 hours following thrombolysis (A).

Subarachnoid haemorrhage

- a Subarachnoid haemorrhage should be considered in any patient presenting with sudden onset, severe and unusual headache with or without any associated alteration in consciousness (B).

Prevention of complications

- a Staff should position patients, whether lying or sitting, to minimise the risk of complications such as aspiration, respiratory complications, shoulder pain, contractures and pressure sores (B).
- b Compression stockings should be applied in stroke patients with weak or paralysed legs (once the patient's peripheral circulation, sensation and the state of the skin have been assessed) (B).

Dysphagia management and nutrition

- a Patients presenting with features indicating dysphagia and/or risk of pulmonary aspiration should receive a full clinical assessment of swallowing by an appropriately trained specialist who should also advise on safe swallow and consistency of diet and fluids (A).
- b Nutritional and hydration support should be considered in any patient with malnutrition or feeding difficulties (B).

- c Enteral feeding tubes should be considered where patients are unable to maintain adequate nutrition orally (A).
- d Patients' needs should be assessed for the most suitable posture and equipment to help them with feeding (D).
- e Patients with feeding and swallowing difficulties should have medication supplied in an appropriate formulation (D).
- f All patients should have their mouth kept clean and free of infection to minimise complications and promote patient comfort (D).

Bladder and bowel management

- a All wards and stroke units should have established assessment and management protocols for both urinary and faecal incontinence and constipation (B).
- b All nurses and doctors should be able to assess incontinent patients, and know who to contact for support and advice (D).
- c There should be active bowel and bladder management from admission (B).
- d Indwelling urinary catheters should be used only after alternative methods of management have been considered, in accordance with NICE guidelines (C).
- e Incontinent patients should not be discharged from hospital until adequate arrangements for continence aids and services have been arranged at home and the carer has been adequately prepared (C).
- f In selecting equipment, factors to consider include ease of putting on, appearance and comfort (B).

Anxiety and depression

- a Patients should be screened for depression and anxiety within the first month of stroke, and their mood kept under review (D).
- b Patients with minor depression should be managed by 'watchful waiting', treatment only being started if the depression is persistent. More severe or already persistent depression should be considered for a trial of antidepressant medication (A) or psychological therapy, given by an appropriately trained and supervised practitioner (B).

Cognitive impairment (eg spatial neglect, memory, attention, praxis)

- a All patients should be screened for the presence of cognitive impairments as soon as is practicable. The nature of the impairment should be determined, and its impact on activity and participation should be explained to patients, carers and staff (D).
- b All members of the multidisciplinary team should take into consideration the patient's cognitive status when planning and delivering treatment (D).
- c Planning for discharge from hospital should include an assessment of any safety risks from persisting cognitive impairments (D).

Communication

- a If the patient has aphasia, the staff and relatives should be informed and trained by the speech & language therapist about communication techniques appropriate to the communication disability (A).

Sensory impairment and pain

- a On a regular basis all patients with stroke should be asked whether pain is a significant problem or a contributing factor to their current clinical state (D).
- b The following interventions to prevent shoulder pain should be considered:
 - i Avoiding the use of overhead arm slings, which encourage uncontrolled abduction (A)
 - ii Use of foam supports (A)
 - iii Education of staff and carers on correct handling of the hemiplegic arm (B).

Secondary prevention

Patients who have suffered a stroke remain at an increased risk of a further stroke of between 30% and 43% within 5 years (Mant et al 2004³). The risk of having a stroke after a TIA may be as high as 20% within the first month. Patients with TIA and stroke also have an increased risk of myocardial infarction and other vascular events. The risk of further stroke is highest early after stroke or TIA. Therefore there should be a high priority given to rapid delivery of evidence based secondary prevention.

- a An individualised strategy for stroke prevention should be implemented within a maximum of 7 days of acute stroke or TIA.
- b Patients first seen in the community with TIA, or with a stroke but having made a good recovery when seen, should be assessed and investigated in a specialist service (eg neurovascular clinic) as soon as possible and within seven days of the incident (B).
- c Patients with more than one TIA in a week should be investigated in hospital immediately (B).
- d All patients should be given appropriate advice on lifestyle factors: stopping smoking (B); regular exercise (D); diet and achieving a satisfactory weight (B); reducing the intake of salt (B); avoiding excess alcohol (D).

- e All patients should have their blood pressure checked, and high blood pressure persisting for over two weeks should be treated. The British Hypertension Society guidelines⁴ are:
 - > in non-diabetic people with hypertension the optimal blood pressure treatment goals are systolic blood pressure <140 mmHg and diastolic blood pressure <85 mmHg
 - > for patients with diabetes mellitus and high blood pressure the optimal goals of control are 130/80 (A).
- f All patients will require review and treatment of risk factors for vascular disease lifelong after stroke.
- g Every attempt should be made to ensure concordance with secondary prevention strategies (C).
- h All patients with ischaemic stroke or TIA who are not on anticoagulation should be taking an antiplatelet agent, ie aspirin (50–300 mg) daily (A), or clopidogrel, or a combination of low dose aspirin and dipyridamole modified release (MR). Where patients are aspirin intolerant, an alternative antiplatelet agent (eg clopidogrel 75 mg daily or dipyridamole MR 200 mg twice daily) should be used (B).

Transfer of care to community

- a Hospital services should have a protocol and local guidelines (A) to ensure that, before discharge occurs:
 - i Patients and families are prepared and fully involved in plans for transfer (D)
 - ii Patients are given information about, and offered contact with, appropriate local statutory and voluntary agencies (D).
- b The patient and/or caregiver should be thoroughly trained in the safe and effective use of any equipment supplied (D).
- c All patients should be given a contact number for future advice or help with equipment provided (D).

Longer-term care

- a Any patient with reduced activity at 6 months or later after stroke should be assessed for a period of further targeted rehabilitation (A).
- b Independence should be encouraged. As patients become more active consideration should be given to withdrawal of physical and psychological support, enteral tubes, cessation of therapy and withdrawal of personal care support (D).
- c Patients and their carers should have their individual psychosocial and support needs reviewed on a regular basis (A).
- d Patients who used to drive before their stroke must be given accurate up-to-date advice on their responsibilities (D).

Research

Stroke teams should be encouraged to participate in well-conducted research, including multi-centre trials, to create the evidence base for future guidelines.

Implementation advice

Stroke nursing is rapidly developing in response to service requirements. Services may wish to consider:

- > Local protocols of care
- > Enhanced nursing roles in: thrombolysis, dysphagia management, psychological assessment and support, coordination between primary and secondary care, research, community based nursing, eg district nurses, practice nurses
- > Nurse-led clinics for TIA, secondary prevention and longer-term review
- > Rehabilitation assistant roles.

Useful web links:

National Stroke Nursing Forum:
www.nationalstrokenursingforum.com

Royal College of Physicians:
www.rcplondon.ac.uk

Stroke Association:
www.stroke.org.uk

References:

- 1 Royal College of Physicians Clinical Effectiveness and Evaluation Unit. *National clinical guidelines for stroke*. 2nd edition. Prepared by the Intercollegiate Stroke Working Party. London: RCP, 2004.
- 2 Royal College of Physicians Clinical Effectiveness and Evaluation Unit. *Stroke in childhood: clinical guidelines for diagnosis and management*. London: RCP (2004 – in press).
- 3 Mant J, Wade D, Winner S. Health care needs assessment: stroke. In *Health care needs assessment: the epidemiology based needs assessment reviews* (Stephens A et al, eds). Oxford: Radcliffe Medical Press, 2004.
- 4 Williams B, Boulter N, Brown M et al. Guidelines for management of hypertension. Report of the 4th working party of the British Hypertension Society 2004-BHSIV. *J Human Hypertension* 2004;18:139–185.

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