



Physiotherapy concise guide for stroke 2016

This profession-specific concise guide contains recommendations extracted from the National Clinical Guideline for Stroke, 5th edition, which contains over 400 recommendations covering almost every aspect of stroke management. The reference number of each recommendation is provided so that they can be found in the main guideline www.strokeaudit.org/guideline. The recommendations below have direct implications for physiotherapists. This concise guide should not be read in isolation, and as members of the stroke multidisciplinary team, physiotherapists should consider the guideline in full.

Resources

2.4.1A People with stroke should be treated on a specialist stroke unit throughout their hospital stay unless their stroke is not the predominant clinical problem.

2.4.1B A hyperacute and/or acute stroke service should provide specialist medical, nursing, and rehabilitation staffing levels matching the recommendations in Table 2.1.

Transfers of care - from hospital to home

2.7.1A Hospital in-patients with stroke who have mild to moderate disability should be offered early supported discharge, with treatment at home beginning within 24 hours of discharge.

2.7.1B An early supported discharge team should care predominantly for people with stroke and should provide rehabilitation and care at the same intensity as would be provided if the person were to remain on a stroke unit.

Goal setting

2.10.1A People with stroke should be actively involved in their rehabilitation through:

- > having their feelings, wishes and expectations for recovery understood and acknowledged;
- > participating in the process of goal setting unless they choose not to, or are unable to because of the severity of their cognitive or linguistic impairments;

> being given help to understand the process of goal setting, and to define and articulate their personal goals.

Rehabilitation approach - intensity of therapy

2.11.1A People with stroke should accumulate at least 45 minutes of each appropriate therapy every day, at a frequency that enables them to meet their rehabilitation goals, and for as long as they are willing and capable of participating and showing measurable benefit from treatment.

2.11.1B In the first two weeks after stroke, therapy targeted at the recovery of mobility should consist of frequent, short interventions every day, typically beginning between 24 and 48 hours after stroke onset.

2.11.1D Healthcare staff who support people with stroke to practise their activities should do so under the guidance of a qualified therapist.

Positioning

3.11.1A Patients with acute stroke should have an initial specialist assessment for positioning as soon as possible and within 4 hours of arrival at hospital.

3.11.1B Healthcare professionals responsible for the initial assessment of patients with acute stroke should be trained in how to position patients appropriately, taking into account the degree of their physical impairment after stroke.

3.11.1C When lying or sitting, patients with acute stroke should be positioned to minimise the risk of aspiration and other respiratory complications, shoulder pain and subluxation, contractures and skin pressure ulceration.

Early mobilisation

3.12.1A Patients with difficulty moving after stroke should be assessed as soon as possible within the first 24 hours of onset by an appropriately trained healthcare professional to determine the most appropriate and safe methods of transfer and mobilisation.

3.12.1B Patients with difficulty moving early after stroke who are medically stable should be offered frequent, short daily mobilisations (sitting out of bed, standing or walking) by appropriately trained staff with access to appropriate equipment, typically beginning between 24 and 48 hours of stroke onset. Mobilisation within 24 hours of onset should only be for patients who require little or no assistance to mobilise.

Arm function

4.2.1A People with stroke with potential or actual arm movement should be given every opportunity to practice functional activities. Practice should be characterised by movements that are of high intensity, repetitive and are task-specific. These activities may be bilateral or unilateral depending on the task.

4.2.1B People with stroke who have 20 degrees of active wrist extension and 10 degrees of active finger extension in the affected hand should be considered for constraint-induced movement therapy.

4.2.1C People with stroke who have been assessed as cognitively suitable to participate in mental practice of an activity should be trained and encouraged to use it to improve arm function, as an adjunct to conventional therapy.

Weakness and ataxia

4.9.1.1B People with loss of movement and/or ataxia after stroke sufficient to limit their activities should be assessed by a physiotherapist with

experience in neurological rehabilitation.

4.9.1.1C People with loss of movement and/or ataxia after stroke should be taught task-specific, repetitive, intensive exercises or activities that will increase strength.

Balance

4.9.2.1A People with impaired sitting balance after stroke should receive trunk training exercises.

4.9.2.1B People with significant impairment of their balance and walking ability after stroke should receive progressive balance training, functional task-specific training, lower limb strengthening exercises and be considered for an ankle-foot orthosis.

4.9.2.1C People with moderate to severe limitation of their walking ability after stroke should be assessed for a walking aid to improve their stability.

Falls and fear of falling

4.9.3.1A People with stroke should be offered falls risk assessment and management as part of their stroke rehabilitation, including training for them and their carers in how to get up after a fall.

4.9.3.1B People with stroke should be offered an assessment of fear of falling as part of their falls risk assessment.

4.9.3.1E People at high risk of falls after stroke should be advised to participate in physical activity/exercise which incorporates balance and coordination at least twice per week.

Walking

4.9.4.1A People with limited ability to walk after stroke should be assessed by a physiotherapist with experience in neurological rehabilitation to guide management.

4.9.4.1B People with limited mobility after stroke should be assessed, provided and trained in how to use appropriate mobility aids including a wheelchair to enable safe independent mobility.

4.9.4.1C People with stroke who are able to walk with or without assistance should undergo task-specific walking training with a cardiorespiratory and/or muscle strength focus at sufficient intensity to improve endurance and walking speed.

4.9.4.1E People who are able to walk independently after stroke should be offered treadmill training with or without body weight support or other walking-orientated interventions at a higher intensity than usual care and as an adjunct to other treatments.

4.9.4.1F People who cannot walk independently after stroke should be considered for electromechanical-assisted gait training including body weight support.

4.9.4.1G People with stroke who have compromised ankle/foot stability and/or reduced ability to dorsiflex the foot ('foot-drop') that impedes safe and efficient walking should be offered an ankle-foot orthosis to improve walking and balance. The orthosis should be evaluated and individually fitted before long-term use.

4.9.4.1H People with stroke who have reduced ability to dorsiflex the foot ('foot-drop') should be offered functional electrical stimulation to improve their gait.

Shoulder pain and subluxation

4.12.3.1A People with functional loss in their arm after stroke should have the risk of shoulder pain reduced by:

- > careful positioning of the arm, with the weight of the limb supported;
- > ensuring that family/carers handle the affected arm correctly, avoiding mechanical stress and excessive range of movement;
- > avoiding the use of overhead arm slings and pulleys.

Sensation

4.13.1A People with stroke should be screened for altered sensation and if present, assessed for sensory impairments using standardised measures.

4.13.1B People with sensory loss after stroke should be trained in how to avoid injury to the affected body parts.

Spasticity and contracture management

4.15.1C People with spasticity after stroke should be monitored to determine the extent of the problem and the effect of simple measures to reduce spasticity e.g. positioning, passive movement, active movement (with monitoring of the range of movement and alteration in function) and/or pain control.

4.15.1D People with persistent or progressive focal spasticity after stroke affecting one or two areas for whom a therapeutic goal can be identified (e.g. ease of care, pain) should be offered intramuscular botulinum toxin. This should be within a specialist multidisciplinary team and be accompanied by rehabilitation therapy and/or splinting or casting for up to 12 weeks after the injections. Goal attainment should be assessed 3-4 months after the injections and further treatment planned according to response.

4.15.1E People with generalised or diffuse spasticity after stroke should be offered treatment with skeletal muscle relaxants (e.g. baclofen, tizanidine) and monitored for adverse effects, in particular sedation and increased weakness. Combinations of antispasticity drugs should only be initiated by healthcare professionals with specific expertise in managing spasticity.

4.15.1G People with stroke with increased tone that is reducing passive or active movement around a joint should have the range of passive joint movement assessed. They should only be offered splinting or casting following individualised assessment and with monitoring by appropriately skilled staff.

Fatigue

4.6.1A People with stroke who are medically stable but who report fatigue should be offered an assessment for mental and physical factors that may be contributing, particularly when engagement with rehabilitation or quality of life is affected.

4.6.1B People with fatigue after stroke and their family/carers should be given information, reassurance and support to identify their personal indicators and triggers for fatigue and supported to develop strategies to anticipate and manage fatigue.

Physical activity

5.8.1.1A People with stroke or TIA should participate in physical activity for fitness unless there are contraindications. Exercise prescription should be individualised, and reflect treatment goals and activity recommendations.

5.8.1.1F Physical activity programmes for people with stroke or TIA should be tailored to the individual after appropriate assessment, starting with low-intensity physical activity and gradually increasing to moderate levels.

Further rehabilitation

5.9.1.1B People with stroke should be offered further therapy if goals for specific functions and activities can be identified and agreed and the potential for change is likely.

5.9.1.1D People with stroke should be helped to develop their own self-management plan.

Self-management

2.13.1A People with stroke should be offered self-management support based on self-efficacy, aimed at the knowledge and skills needed to manage life after stroke, with particular attention given to this at reviews and transfers of care.

Stroke services for younger adults

2.14.1B Acute stroke services should:

- > recognise and manage the particular physical, psychological and social needs of younger people with stroke (e.g. vocational rehabilitation, child care);
- > liaise with regional neurorehabilitation services specialising in the neurorehabilitation of young adults.

People with stroke in care homes

2.17.1A People with stroke living in care homes should be offered assessment and treatment from community stroke rehabilitation services to identify activities and adaptations that might improve quality of life.

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