ROYAL COLLEGE OF PHYSICIANS

NATIONAL CLINICAL GUIDELINES FOR STROKE – 2ND EDITION

PRIMARY CARE CONCISE GUIDELINES FOR STROKE 2004

Stroke is a major cause of mortality and morbidity in the United Kingdom, affecting over 130,000 people each year. Much of the responsibility for delivering effective secondary prevention and managing longer term problems associated with stroke falls to the primary care team. These guidelines are selected from the full *National Clinical Guidelines for Stroke* as being the key ones that primary care teams need to be aware of, although they are not the only guidelines relevant to primary care. They apply to all patients with TIA and stroke, irrespective of whether it is a first or recurrent stroke.

Investigation and Management of Patients with TIA

The risk of developing a stroke after a hemispheric TIA **can be as high as 20%** within the first month, with the greatest risk within the first 72 hours.

a. Patients with TIA, or patients with a stroke who have made a good recovery when seen, should be assessed and investigated in a specialist service (e.g. neurovascular clinic) as soon as possible within seven days of the incident.

b. Once all symptoms have resolved after TIA, aspirin (at an initial dose of 300mg daily) should be prescribed immediately and continued until a definitive management plan is established.

c. Patients with **more than one TIA in a week** should be investigated in **hospital immediately**.

Acute Stroke Management

a. Patients should be admitted to hospital for initial care and treatment, with the expectation that they will be managed on a stroke unit. Exceptions may include those relatively few patients for whom the diagnosis will make no difference to management, e.g. where optimal management is palliative care.

b. Patients should only be managed at home if the guidelines for acute investigation, treatment and care can be adhered to.

c. Patients with persisting impairments, not admitted to hospital should be seen by a specialist stroke rehabilitation team that includes a specialist occupational therapist.

d. **Brain imaging** should be undertaken as soon as possible in all patients, **at least within 24 hours** of onset unless there are good clinical reasons for not doing so.

e. Brain imaging should be undertaken as a matter of urgency if the patient:

- is currently taking anticoagulant treatment
- has a depressed level of consciousness
- has papilloedema, neck stiffness or fever
- has indications for thrombolysis or early anticoagulation
- has a known bleeding tendency
- has unexplained progressive or fluctuating symptoms
- has severe headache at onset

f. All stroke patients should have access to specialist palliative care expertise when needed.

Secondary Prevention of Stroke and TIA

Patients who have suffered a stroke remain at an increased risk of a further stroke (between 30 and 43% risk within five years). 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.

General

a. All patients should have an individualised strategy for stroke prevention that should be implemented within a **maximum** of 7 days of acute stroke or TIA.

b. All patients should be given appropriate advice on lifestyle factors, including: stopping smoking, regular exercise, diet and achieving a satisfactory weight, reducing the intake of salt, and avoiding excess alcohol.

c. All patients should receive regular review and treatment of risk factors for vascular disease for the rest of their lives after a stroke with inclusion on a stroke register and a minimum of annual follow-up.

d. All patients should receive an annual flu vaccination.

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Secondary Prevention of Stroke and TIA (continued)

Blood pressure

a. All patients should have their blood pressure checked, and high blood pressure persisting for over two weeks should be treated. The British Hypertension Society guidelines 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.

b. Further reduction of blood pressure should be undertaken using a thiazide diuretic (e.g. bendroflumethiazide or indapamide) or an ACE inhibitor (e.g. perindopril or ramipril) or preferably a combination of both, unless there are contraindications.

Anti-thrombotic treatment

a. All patients with ischaemic stroke or TIA who are not on anticoagulation, should be taking an antiplatelet agent i.e. low-dose aspirin (e.g. 75mg), or clopidogrel, or a combination of low-dose aspirin and dipyridamole modified release (MR). Where patients are aspirin intolerant an alternative antiplatelet agent (e.g.clopidogrel 75mg daily or dipyridamole MR 200mg twice daily) should be used.

b. Anticoagulation should be started in every patient with persistent or paroxysmal atrial fibrillation (valvular or non-valvular) unless contraindicated.

c. Anticoagulants should not be used for patients in sinus rhythm unless there is a major source of cardiac embolism.

d. Anticoagulants should not be started until brain imaging has excluded haemorrhage, and usually not until 14 days have passed from the onset of an ischaemic stroke.

Anti-lipid agents

a. Treatment with a statin (e.g. 40mg simvastatin) should be given to patients with ischaemic stroke or TIA, and total cholesterol of >3.5mmol/L unless contraindicated.

Longer-term Management

By 6 months over half of stroke survivors will need some help with activities of daily living. 15% will have communication impairments and 53% motor weakness and many will have problems with mood or cognition. Morbidity within the carers is high.

a. Patients and their carers should have their individual psychosocial and support needs reviewed on a regular basis. This will include mood (depression and anxiety), cognitive impairment, pain, communication difficulties, continence, functional ability, equipment needs and social integration.

b. Patients should continue to have access to specialist care and rehabilitation after leaving hospital.

c. Any patient with reduced function at 6 months or later after stroke should be assessed for a period of further targeted rehabilitation.

d. 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 support.

Information and support needs

a. The needs of the carers should be considered from the outset.

b. Health and social services professionals should ensure that patients and their families have information about the statutory and voluntary organisations offering services specific to these needs.

Audit

a. All GPs should keep a register of stroke patients and conduct a regular audit of secondary prevention and management of chronic disability, as specified in the new GMS contract.

Reference

The Intercollegiate Working Party for Stroke, Royal College of Physicians. *National Clinical Guidelines for Stroke, 2nd edition*. London, 2004.

For more information, see:

For more information, see:	**British Medical Association**	www.bma.org.uk
	British Hypertension Society	www.bhsoc.org
	Royal College of Physicians	www.rcplondon.ac.uk