One + all | we care

NHS
Royal Cornwall Hospitals
NHS Trust

Secondary Prevention after Stroke or Tia Clinical Guideline

V9.0

November 2019

1. Aim/Purpose of this Guideline

1.1. The aim of this document to inform clinicians on management of secondary prevention for patients after stroke or TIA in Cornwall.

1.2. This version supersedes any previous versions of this document.

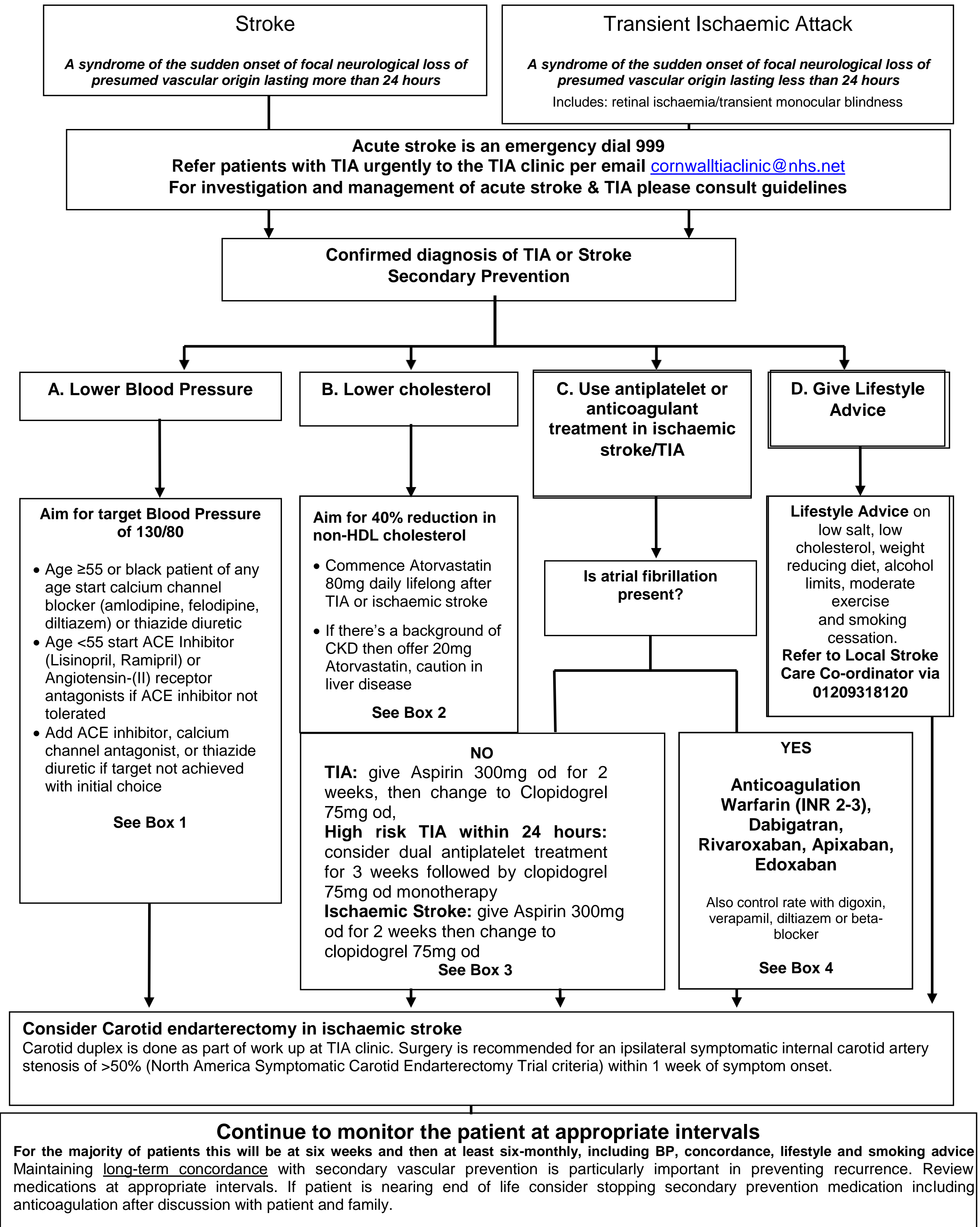
1.3. **Data Protection Act 2018 (General Data Protection Regulation – GDPR) Legislation**

The Trust has a duty under the DPA18 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed and documented. We can't rely on Opt out, it must be Opt in.

DPA18 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the DPA18 please see the 'information use framework policy', or contact the Information Governance Team rch-tr.infogov@nhs.net

2. The Guidance



2.1. These are clinical guidelines and should be used pragmatically. Treatments should be decided upon after a shared decision making process with your patient. The guidelines are based on studies involving younger patients with a limited range of underlying illness. Many Strokes occur in complex, multi-morbid patients who are under-represented in these studies, and aspects of the following guidance will not be appropriate for these patients. Conversely, in younger, less complex patients, one would anticipate closer adherence to the guideline.

2.2. For clinical advice in individual cases, contact Eldercare consultant via RCHT switchboard 01872 25000

2.3. Management of Blood Pressure

2.3.1. Optimal target blood pressure is **130/80 mmHg** for patients with cerebrovascular disease.

2.3.2. The PROGRESS study showed a 5% absolute risk reduction and 43% relative risk reduction in stroke after treatment with ACE and thiazide diuretic at 5 years[1]. This equates to a number needed to treat (NNT) of 11 to prevent 1 stroke at 5 years (1).

2.3.3. In patients with known bilateral severe carotid stenosis (>50%) higher target of 150/80 may be appropriate.

2.3.4. Monitoring of ACE Inhibitor or ARB therapy: Monitor BP, renal function and serum potassium:

- 1 week prior to treatment
- 1 week and 1 month after initiation
- 1 week after significant change in dosage or addition of an interacting drug e.g. diuretic
- When there is a significant change in the patient's condition or during severe concurrent illness

2.3.5. Consider discontinuation of blood pressure medication if risks outweigh benefits.

2.4. Management of Cholesterol

2.4.1. Initiate all 'vascular' patients (such as those after stroke or TIA) on 80 mg OD of Atorvastatin, regardless of age and baseline total cholesterol (2,4).

2.4.2. If there's a risk of drug interactions or adverse effects then consider lower dose of atorvastatin.

2.4.3. If unable to tolerate high-intensity statin aim to treat with the maximum tolerated dose.

2.4.4. If adverse effects reported when taking high intensity statin then discuss following options:

- Stop statin & try again when symptoms resolved

- Reduce dose within same intensity group
- Change statin to lower intensity group

2.4.5. Seek specialist advice for people at high risk of vascular event who are intolerant to 3 different statins

2.4.6. Consider discontinuation of cholesterol medication if risks outweigh benefits.

2.5. Antiplatelet Treatment

2.5.1. For the long-term prevention of ischaemic events after stroke or TIA, use Clopidogrel monotherapy, 75 mg OD (3). New studies not included in recent guidelines suggest combination therapy of aspirin and clopidogrel for high risk TIA and minor stroke if it can be given within 24 hours of event –starting with stat loading dose of 300mg od of each and continuing low dose 75 mg od of each for 3 weeks. Followed by clopidogrel monotherapy (10).

2.5.2. High risk TIA: (recurrent TIA, significant carotid or vertebral artery disease, ABCD 2 score ≥ 4). Please discuss with eldercare consultant via RCHT switch board.

2.5.3. If intolerant of clopidogrel, then use the combination of Aspirin 75 mg OD plus Dipyridamole MR 200 mg BD.

2.5.4. Consider discontinuation of antiplatelet therapy if risks outweigh benefits.

2.6. Anticoagulant Treatment

2.6.1. Anticoagulation is appropriate for the secondary prevention of stroke or TIA associated with atrial fibrillation (persistent or paroxysmal), but should not be introduced until two weeks after stroke unless neurological signs have fully resolved before then. It is also appropriate where stroke or TIA is associated with a prosthetic heart valve, rheumatic mitral valve disease or within three months of a myocardial infarct (mural thrombus). Warfarin reduces the annual risk of recurrent stroke by approximately two thirds, from 12% to 4% (3, 5,7).

2.6.2. Warfarin, Dabigatran, Rivaroxaban, Apixaban, Edoxaban should be offered to patient for anticoagulation for non valvular AF (3,7, 9).

2.6.3. Apixaban is recommended in patients with chronic kidney disease (GFR 30-50) Dabigatran, Rivaroxaban, Apixaban, Edoxaban do not require INR monitoring.

2.6.4. In event of bleeding patients should be instructed to omit therapy until medically assessed.

2.6.5. Antidot Idarucizubam is available intravenously for management of dabigatran related bleeds. Follow guidance as per Thrombosis Prevention Investigation And Management Of Anticoagulation Guidance and Peninsula Network Guidance on Novel anticoagulants for patients with TIA or stroke (see intranet).

2.7. Contraindications (underlined) and cautions for anticoagulants:

2.7.1. **Major bleeding** (active, current or unexplained)

- **Uncorrected major bleeding disorder**
- **Potential bleeding lesions** e.g. active **peptic ulcer**; oesophageal varices; aneurysm; proliferative retinopathy; recent organ biopsy; recent trauma or surgery to head, orbit, spine; recent stroke within 2 weeks; confirmed intracranial or intraspinal bleed

2.7.2. **Severe hypertension** e.g. systolic greater than 200 mmHg or diastolic greater than 120 mmHg (control BP first)

2.7.3. Bacterial endocarditis

2.7.4. **Pregnancy** Risk of teratogenicity

- **Uncooperative person** Problems with concordance and follow-up
- **Repeated falls or unstable gait** Increased risk of injury
- **Concomitant use of drug that increases risk of GI bleeding**
- Documented **coumarin instability** or **non-compliance**.
- Patients nearing the end of their life
- **Protein C deficiency** Risk of skin necrosis on initiation of treatment, so caution needed

3. Monitoring compliance and effectiveness

Element to be Monitored	Management of Secondary prevention appropriately for TIA and Stroke
Lead Lead	Stroke Team
Tool	Sentinel Stroke National Audit Programme, TIA clinic
Frequency	Daily
Reporting arrangements	Monthly review at Stroke Operational Group Meeting
Acting on recommendations and Lead(s)	Stewart Cardwell manager, Katja Adie consultant
Change in practice and lessons to be shared	At Stroke Operational Group Meetings, led by manager Stewart Cardwell

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Inclusion & Human Rights Policy' or the Equality and Diversity website.

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Document Title	Secondary Prevention after Stroke or Tia Clinical Guideline V9.0
Date Issued/Approved:	13 November 2019
Date Valid From:	November 2019
Date Valid To:	November 2022
Directorate / Department responsible (author/owner):	Dr Katja Adie, Eldercare Department
Contact details:	01872 253473
Brief summary of contents	Management of secondary prevention including management of antiplatelet therapy, blood pressure, cholesterol, anticoagulation and lifestyle advice for patients following TIA or stroke
Suggested Keywords:	Acute Stroke Management
Target Audience	RCHT ✓ / CFT / KCCG
Executive Director responsible for Policy:	Medical Director
Date revised:	13/11/2019
This document replaces (exact title of previous version):	Secondary Prevention After Stroke Or Tia (Primary And Secondary Care Cornwall) V8.0
Approval route (names of committees)/consultation:	Eldercare Governance Group 8/11/2019, Stroke operational group 13/11/2019
Care Group General Manager confirming approval processes	Jo Floyd
Name and Post Title of additional signatories	Not Required
Name and Signature of Care Group/Directorate Governance Lead confirming approval by specialty and care group management meetings	{Original Copy Signed} Name: Paul Evangelista
Signature of Executive Director giving approval	{Original Copy Signed}
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet & Intranet ✓ / Intranet Only

Document Library Folder/Sub Folder	Clinical / Stroke
Links to key external standards	None required
Related Documents:	Stroke Thrombolysis, Stroke and TIA Care pathway, Peninsula Referral Guidelines for Early Decompressive Surgery in Acute Ischaemic Stroke, Peninsula Network Guidance on Novel Anticoagulants for Stroke and TIA References 1) Arima et al. Lower target blood pressures are safe and effective for the prevention of recurrent stroke: the PROGRESS trial *Journal of Hypertension. 2006;* 24**,** 1201-1208 2) Amarenco et al. Stroke Prevention by Aggressive Reduction in Cholesterol Levels (SPARCL). High-dose atorvastatin after stroke or transient ischaemic attack *N Engl J Med. 2006;* 355**,** 549-59. 3) NICE Guideline (NG 128). Stroke and TIA in over 16s Diagnosis and initial management. May 2019 https://www.nice.org.uk/guidance/ng128 4) NICE Guidelines (CG 181). Lipid modification for primary and secondary prevention of cardiovascular disease. July 2014. 5) The Atrial Fibrillation Follow-up Investigation of Rhythm Management (AFFIRM) Investigators. A comparison of rate control and rhythm control in patients with atrial fibrillation. N Engl J Med. 2002;347,1825-1833. 6) Cornwall Joint Formulary https://www.eclipsesolutions.org/Cornwall/ 7) NICE CG 180. The Management of Atrial Fibrillation. June 2014 8) Thrombosis Prevention Investigation And Management Of Anticoagulation Guidance. RCHT Trust Guidelines 2019 9) Peninsula Network Guidance on Novel Anticoagulants for prevention of stroke and systemic embolism in AF. RCHT Trust Guidelines 2018. 10) Wang et al. Acute dual antiplatelet for minor stroke or TIA. BMJ 2019; 364:1895. https://www.bmj.com/content/364/bmj.l895

Training Need Identified?	No

Version Control Table

Date	Version No	Summary of Changes	Changes Made by *(Name and Job Title)*
2008	V1.0	Initial Issue	K Adie, consultant
2009	V2.0	Updated with new clinical evidence	K Adie, consultant
2010	V3.0	Updated with new clinical evidence	K Adie, consultant
2011	V4.0	Updated with new clinical evidence	K Adie, consultant
2012	V5.0	Updated with new clinical evidence	K Adie, consultant
2014	V6.0	Updated with new clinical evidence	K Adie, consultant D Nash, medical student
2015	V7.0	Updated with new clinical evidence and guidance	K Adie, consultant
2017	V8.0	Updated with new clinical evidence	K Adie, consultant
13.11.19	V9.0	Updated with new guidance and transposed latest Trust template	K Adie, consultant

All or part of this document can be released under the Freedom of Information Act 2000

This document is to be retained for 10 years from the date of expiry.
This document is only valid on the day of printing

Controlled Document
This document has been created following the Royal Cornwall Hospitals NHS Trust Policy for the Development and Management of Knowledge, Procedural and Web Documents (The Policy on Policies). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Initial Equality Impact Assessment Form

Name of the strategy / policy /proposal / service function to be assessed Secondary Prevention after Stroke or Tia Clinical Guideline V9.0	
Directorate and service area: Stroke	**New or existing document:** Existing
Name of individual completing assessment: Katja Adie, consultant	**Telephone:** 01872 252084

1. *Policy* Aim* *Who is the strategy / policy / proposal / service function aimed at?*	The aim of this document to inform clinicians on management of secondary prevention following stroke or TIA in Cornwall.				
2. *Policy* Objectives*	The guidance enables clinical staff to prevent further cerebrovascular events.				
3. *Policy* – intended Outcomes*	Gold standard stroke care				
4. *How will you measure the outcome?	Sentinel Stroke National Audit Programme Monthly board report				
5. Who is intended to benefit from the *policy*?	Patients with new stroke or TIA in Cornwall				
6a Who did you consult with b). Please identify the groups who have been consulted about this procedure.	Workforce	Patients	Local groups	External organisations	Other
					x
	Please record specific names of groups This is existing policy and has been widely consulted Clinicians at RCHT, GPs, Managers, Stroke survivors Eldercare governance meeting 7/7/2017 and Stroke operational group meeting 13/7/2017 This is not a procedure but a clinical guideline. It has been signed off by the stroke operational group.				
What was the outcome of the consultation?	Agreed				

7. The Impact
Please complete the following table. **If you are unsure/don't know if there is a negative impact you need to repeat the consultation step**.

Are there concerns that the policy **could** have differential impact on:

Equality Strands:	Yes	No	Unsure	Rationale for Assessment / Existing Evidence
Age		**X**		Over 55's highlighted as greater risk and therefore pathway acknowledges this.

Sex (male, female, trans-gender / gender reassignment)		**X**		
Race / Ethnic communities /groups		**X**		Specific guidelines in place for black patients due to increased risk based on research.
Disability - Learning disability, physical impairment, sensory impairment, mental health conditions and some long term health conditions.		**X**		
Religion / other beliefs		**X**		
Marriage and Civil partnership		**X**		
Pregnancy and maternity		**X**		
Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian		**X**		

You will need to continue to a full Equality Impact Assessment if the following have been highlighted:

- You have ticked "Yes" in any column above and
- No consultation or evidence of there being consultation- this excludes any *policies* which have been identified as not requiring consultation**. or**
- Major this relates to service redesign or development

8. Please indicate if a full equality analysis is recommended.	**Yes**		**No**	**X**

9. If you are **not** recommending a Full Impact assessment please explain why.

Not indicated

Date of completion and submission	13.11.2019	Members approving screening assessment	Policy Review Group (PRG) **'APPROVED'**

This EIA will not be uploaded to the Trust website without the approval of the Policy Review Group.

A summary of the results will be published on the Trust's web site.