

## **NHS Scotland clinical guidance for TIA and stroke management during the COVID-19 pandemic.**

### **Background**

The ongoing COVID-19/SARS-CoV-2 pandemic is placing unprecedented demands on healthcare systems worldwide<sup>1,2</sup> including the NHS in Scotland, UK. This document concerns the management of patients with possible transient ischaemic attack or stroke in Scotland, will list specific challenges and offer guidance to help healthcare professionals provide stroke care in this difficult situation.

This COVID-19 pandemic (and its response) will deplete stroke rota staffing through redeployment and illness, reduce the availability of ambulance services to transport patients with stroke, re-allocate stroke unit beds, reduce the number of ITU beds available for stroke patients, reduce outpatient clinic availability, reduce non-essential investigations and reduce certain secondary prevention treatments such as carotid endarterectomy amongst other effects. In addition the risk/benefit ratios of attending hospital and other interventions will change (and continue to change).

Whilst the COVID 19 pandemic will claim many lives, it is vital that this burden is not increased by inadequate care for stroke patients leading to additional avoidable harms.

### **Statements of intent**

- Stroke remains an important, common, treatable cause of death and dependence and NHS Scotland will continue to provide access to stroke care for all patients.
- Patients should be encouraged to seek emergency attention when they experience symptoms of a stroke as almost all acute stroke treatments should be available during the pandemic and can reduce disability.

Healthcare providers should strive to deliver high quality stroke and TIA care, aiming to adhere to national guidelines for acute treatments and secondary prevention although it is recognized that full compliance with these should be a goal rather than an expectation<sup>2</sup>.

### **Organisational change**

- Organisations need to ensure that healthcare professionals who deliver essential elements of stroke services retain sufficient dedicated time to do so. Otherwise patients outcomes, flow and bed availability will be compromised.
- Healthcare professionals should adopt flexible working practices to support frontline COVID-19 services - this may involve stroke physicians

geriatricians/acute medical physicians or stroke nurses supporting COVID-19 services and neurologists supporting stroke units.

- To maintain quality stroke services boards must proactively identify other professionals who have core skills that could support stroke services when needed. This will create a flexible pool of professionals who can work where the need is on a day-to day or week to week basis.
- With depleted rotas, 24 hour access to a stroke specialist will be compromised. Regional or even national telestroke rotas could provide this access (and support to other hospitals) but will require co-operation between NHS Boards.
- Communication between NHS Boards should be optimized with clear contacts and structure to allow quick decision making and approval of new pathways and continued governance at a local and national level.
- Consider novel communications eg between ambulance personnel and stroke physicians to optimise decision making early in the patient journey and to minimize burden on SAS and hospitals.
- Local services must consider contingencies for staff illness or an increase in COVID-19 admissions –this should include back up rotas which are activated as pressures grow.
- NHS Boards should have different pathways for COVID positive or suspected patients and COVID negative patients operating in parallel. Stroke services should provide guidance for stroke patients in both COVID positive and negative streams and who are not in their normal place of care eg post thrombolysis care in a COVID ward.
- Many in, or out patient interactions, in or out of hours, should be performed virtually (not in person) using whichever medium is most efficient and ensuring patient confidentiality. Options include telephone or videoconferencing with Whatsapp, FaceTime, Hospify.
- Personal protective equipment – for all contacts including swallow assessment and nasogastric tube insertion follow the most up-to-date NHS Scotland guidance at (<https://www.hps.scot.nhs.uk/a-to-z-of-topics/covid-19/>).

### **Hyperacute stroke care**

- Consider using virtual assessment/telestroke
- During patients assessment, minimise staff interactions with patient, aim for a single early senior review to minimise duplication and maximise early decision making to reduce cross infection
- Perform simultaneous COVID-19 risk assessment
- Consider all other interventions e.g blood pressure management in ICH, decompressive hemicraniectomy on a patient by patient basis.
- Consider early anticipatory care planning (with specialist input).
- Consider CT angiography of the neck blood vessels (or CT thorax if indicated for COVID-19 patients) performed at the same time as CT brain to minimize future visits to the radiology department

## **The Stroke Unit and Rehabilitation**

- Ensure stroke patients have early access to stroke units.
- Patients may be moved to other rehabilitation facilities – ensure that all documentation including draft discharge summaries are up to date. Consider early discharge to community settings
- Ensure that appropriate mechanisms are in place to support discharge and prevent readmission, with specialist stroke nurses - via virtual means where required.
- Consider the support of third sector partners, eg The Stroke Association or Chest Heart and Stroke Scotland and encourage support from families to facilitate discharge and care.

## **TIA and outpatient clinics**

- Should be performed quickly and virtually whenever possible
- Use careful consideration about the risk benefit ratios of attending hospital for any reason and for any investigation or intervention – including prolonged ECG monitoring (low yield) or carotid dopplers (where chances of catching COVID-19 may outweigh benefits of endarterectomy)
- Strive for early aggressive secondary prevention for TIA eg dual antiplatelet, BP and cholesterol control and ensure patients can receive medications on the day of referral.

## **Standards to strive to maintain (in keeping with previous targets)<sup>3</sup>**

- Early brain scanning
- Quick delivery of thrombolysis
- Early swallow screen
- Early access to stroke unit
- Aspirin for all appropriate patients
- TIA patients assessed quickly and secondary prevention instigated

Finally, these changes will require clear leadership, flexibility, exemplary communication between specialties but above all, kindness to others (and yourself).

## **References**

1. NHS England. Speciality Guide – Stroke and coronavirus v1 24March2020. [www.england.nhs.uk](http://www.england.nhs.uk)
2. AHA guidance Temporary Emergency Guidance to US Stroke Centers During the COVID-19 Pandemic and On Behalf of the AHA/ASA Stroke Council Leadership <https://doi.org/10.1161/STROKEAHA.120.030023>
3. Scottish Stroke Improvement Program. National Report 2019. [www.strokeaudit.scot.nhs.uk](http://www.strokeaudit.scot.nhs.uk)