Starting the Restart: ABN Guidance on recommencing neurology services in the recovery phase of the COVID-19 pandemic Version 1. 20 May 2020

Prepared by the ABN Executive in association with subspecialist Advisory Groups

Introduction

Early in the COVID-19 epidemic, the ABN, in collaboration with other specialist medical associations through the Royal College of Physicians, supported a reduction in face to face neurology services for non-emergency and essential care to protect patients and the workforce and permit time to plan service reconfiguration. Guidance was issued identifying patient groups at increased risk from COVID-19 and those for whom shielding was recommended. As the impact of COVID-19 upon hospital services starts to reduce, the following suggestions are intended to guide a safe restart of services. Guidance has also been prepared by the Royal College of Physicians. This guidance is likely to be updated.

Neurology services are complex and have evolved around local and regional requirements. Neurologists may be based at neuroscience centres servicing a number of trusts. Other neurologists are based at District General Hospitals with links to a neuroscience centre. Some areas have a network of neurology centres with inpatient neurology beds linked to a neuroscience centre. Variability in response is to be expected and is appropriate.

Most centres are likely to have to manage a backlog of work in a range of services. This document is intended to highlight the areas that might require consideration when restarting services and to assist in prioritising them.

The assessment of risk from COVID-19 must be individualised. This includes the risk of contracting the viral infection and risk of complications arising from it. The reproductive value, R0, which measures how many people, on average, will be infected for every one person who has the disease, varies temporally and spatially in the UK. So even though the overall incidence of viral infection may be falling there will be pockets of continuing transmission in places such as care homes. BAME colleagues and patients may be at particular risk if infected. Re-established services will need to be designed around the need to protect all vulnerable groups, to prevent infection transmission but also to generate confidence in the safety of services so that patients with neurological symptoms will present without delay.

There is a need to balance the ongoing risk to patients and staff of contracting COVID-19 and the risks of serious unintended harm arising from delayed diagnosis and treatment of patients with neurological symptoms. This balance, which is dynamic and changeable, may vary across the UK.

Opportunities

The need for strict infection control has resulted in service innovations that could have long-lasting and potentially permanent effects on clinical practice. Services that can

safely operate using phone or video clinics are likely to continue to do so to some degree, as they are of benefit to selected patients. A review of service changes and innovations is being undertaken by the ABN to determine which were deemed effective and new best practice will need to be shared.

Challenges

The tariff structure of some services will need to be modified to enable new work practices; it should be assumed that remote consultations are no quicker than a face-to-face consultation, and a subsequent face-to-face appointment may be necessary for a proportion of patients at a later date. Remote clinics require less physical infrastructure which may reduce costs; however, the cost of working remotely (including from home) should be evaluated formally.

The maturity of NHS digital infrastructure is a rate-limiting factor; technological capability at sites may need to be upgraded to optimise experience for neurologists and patients, including electronic access to medical records.

Working from home will change the work dynamic for many; the impact of that change on well-being and productivity needs to be assessed.

A number of activities that provide peer-support, education and training will need to be re-configured, and in some cases, may simply not be feasible; for example, it is difficult to align group bedside teaching with social distancing. New ways of teaching using technology will be needed.

Developing guidance for the recovery phase

Restarting services is more challenging than shutting them down. Staff have been redeployed and whole services relocated in some regions. A range of constraints are now emerging. The reintroduction of services will need be planned and phased and guidance may be subject to change as new evidence becomes available. The situation and impact on staff and services is dynamic in response to the virus prevalence and R0. It is therefore difficult to offer condition-specific guidance.

There will be a backlog of clinical activities arising at all stages of the patient pathway from delayed presentation of potentially serious disease in primary care to delayed investigations in secondary care. Many thousands of patients have had their scheduled treatments postponed, including infusions for MS or immunoglobulins. Short delays in treatment may not be hazardous but prolonged delays risk disease relapse and an accumulation of need for treatments that cannot be offered because of constraints in facilities and staffing.

The appendix at the end of this document was prepared with the guidance of the ABN Advisory Groups and suggests timescales to define the urgency of various neurology services. Some of the suggested timings are aspirational and will vary considerably between services. None the less it offers an indication as to the relative time course of services that might need restarting.

Key issues

Triage

- Triage will be an essential part of the restoration of services. It will be necessary to consider prioritisation of
    - follow-up patients
    - those receiving therapies for long-term conditions
    - newly referred patients.

- Triage provides a flexible and responsive initial clinical contact with a patient which is reassuring, efficient and often gives new insight into the patient's situation. This may be via tele-consult initially, and then if necessary lead to a face to face appointment. The RCP has published guidance[1] on this:].

- Redeveloping our relatively rigid structure to incorporate this flexibility will improve patient's experience.

- Different models of triage have been developed which can safely and rapidly manage significant numbers of patients without clinic appointments. ABN advice and guidance documentation is [here]. It is vital that this work is recognised by the individual trust and commissioners and incorporated into job plans.

Workforce

- Redeployment of staff: Services may require colleagues to change their site of working or subspecialty for a period to re-establish priority services.

- Differential risks in the workforce: particularly BAME colleagues, older staff and those with comorbidities.

- Staffing shortages: managing staffing demands due to self-isolation and redeployment, especially in relation to specialist nurses

- Specialist nurses: Prioritising return to normal duties of key groups of staff will be necessary to re-commence delivery of some services, such as MS disease modifying therapies.

- Complex services are often delivered by teams of medical, nursing, and administrative staff.

Training

- Redeployed staff require continuing training even if not in their usual work setting.

- Optimisation of training opportunities in a virtual setting requires significant thought and time. Anecdotally, lectures and small group teaching have so far been highly

successful, however, thought needs to be given as to how to replace bedside group teaching and hands-on clinical experience.

- The RCP has published guidance[2].

Clinical academics

- Clinical academics in training often take time out of training in parallel with the August to August training cycle. They will require flexibility in funding and time to complete their research. This may require flexibility in the rotas of non-academic trainees or for example the employment of clinical fellows to fill rota gaps.

- Academics who have left research posts to support the NHS in full time clinical posts may require support to resume their careers and potentially costed extensions at the end of their predicted completion date in order to make up the research time lost through service commitments. The RCP has published guidance-Supporting clinical academic trainees return to research[3]

Infection control measures

- The importance of infection control, and how social distancing will directly impact capacity of out-patient areas, diagnostic facilities and treatment services

- The need for secure supplies of PPE appropriate to the clinical setting and the individualised level of risk for staff and service users

- Obtaining rapid COVID-19 Testing for staff and their family members

Appendix

Service Prioritisation

The ABN Advisory Groups reviewed the timing of the diagnostic procedures and treatment requirements for a range of neurological conditions. This list is not comprehensive. It will be continually updated and modified in response to ongoing discussions with ABN members, and some of the timings may appear aspirational, but will hopefully offer ideas and guidance in planning and prioritising the re-establishment of local services.

First OPD (Emergency): Within 1 week

MS: Telephone triage of new symptoms / relapse (prevalence1-3 per week per million population)

PD-HD (24h-72h): review of patients with (drug-induced) psychosis and severe ICD

Post-ictal psychosis: emergency clinic or telephone clinic

Pregnancy in woman with known epilepsy: telephone clinic

New weakness sufficient to impair limb function, and/or new sphincter dysfunction: emergency clinic

Assessment and imaging of acute spinal cord syndromes or acute visual loss [especially in the context of NMOSD]: emergency clinic

Interventions (Emergency): Within 1 week

TIA Service (within 24 hours): structural imaging including vascular imaging, arterial Dopplers, ECG/cardiac monitoring, echocardiography (selected cases), wearable cardiac rhythm monitors, initiation of optimal secondary prevention (antithrombotic medication, statins, anti-hypertensives, lifestyle advice)

Acute Stroke Services: mechanical thrombectomy, decompressive hemicraniectomy and other acute neurosurgical intervention, endarterectomy (probably within 10-14 days max.), medical management. Repeat imaging should be available to support clinical decision-making over full acute and subacute phases.

Sudden onset headache with features suggestive of subarachnoid haemorrhage – irrespective of headache intensity

Brain imaging for suspected subdural haematoma (especially post non-serious head injury in relevant clinical population)

First OPD (Urgent): Within 2 weeks

First seizure/new onset seizures - within 2 weeks (hot clinic/A+E/TC)

Loss of seizure control in person known to have epilepsy (TC)

TIA and stroke referrals: may have urgent delayed referrals needing prioritised assessment in light of significant reduction in referrals

Progressive symptoms causing loss of function (limb, bulbar, visual) will need to be triaged to urgent assessment

Red flag headache with progressive neurological features (those with features suggestive of CNS infection, brain vascular lesions should be referred for emergency assessment)

Interventions (Urgent): Within 2 weeks

MRI:

- MS: Assessment, including MRI of symptoms which is considered might be PML
- encephalopathy which is considered might be autoimmune or vasculitic
- focal seizures with potential SOL
- progressive neurological symptoms that may be due to suspected epidural spinal cord compression, often with known PMH cancer.

EMG/NCS: acute neuropathy

IVIG: CIDP or myasthenia

Brain biopsy: possible cerebral vasculitis or CML

Treatment

Cyclophosphamide treatment: vasculitis affecting the brain or peripheral nerves

Plasma exchange: acute relapses of NMOSD or MS; autoimmune encephalitis; or myasthenia

Carotid endarterectomy: post stroke

First OPD: Within 1 month

Weakness considered a possible sign of myasthenia or MND

Visual symptoms in suspected raised intracranial pressure.

Established MND – symptoms suggestive of need for PEG (% loss body weight and dysphagia)

Established MND – symptoms suggestive of impending respiratory deterioration (morning headache, orthopnoea, known respiratory compromise)

Interventions: Within 1 month

MRI/CT imaging: to rule out serious, progressive disease where history not sufficient for diagnosis (multifocal, loss of balance); first seizure.

Lumbar puncture: diagnosis of MS, acute and subacute neuropathy, idiopathic intracranial hypertension

Neurophysiology for acute progressive neuropathy

NIV for neuromuscular weakness (neuropathy or myopathy)

Nerve biopsy: CIDP or amyloid

Muscle biopsy: acute myopathy

Use of natalizumab in place of Alemtuzumab, cladribine and ocrelizumab.. See ABN guidance on infusion intervals and monitoring[4].

Intractable cluster headache/ injection dependent primary headache

Botulinum toxin treatments for dystonia- review assessment. Battery replacement brain stimulators [mainly Parkinson's disease].

Cardiological tests for transient loss of consciousness (TLOC) presenting to neurologists where primary neurological cause felt to be unlikely

OPD: Within 3 months

Intractable cluster headache/ injection dependent primary headache

Parkinson's disease out-patient consultations for elderly vulnerable where phone consultation regarded as being inadequate. Significant risk of missing practical issues beyond drug treatments.

Botulinum toxin treatments: dystonia - first assessment

Progressive weakness suggestive of neuromuscular disorder: CIDP, ALS/MND, myasthenia, inflammatory myopathy, mitochondrial disease requiring <3 months diagnosis and treatment.

Interventions: Within 3 months

Routine diagnostic tests and assessments, including MRI

Alemtuzumab and cladribine treatments that have been cancelled or deferred; ocrelizumab treatments delayed or deferred

Blood monitoring for multiple sclerosis Disease Modifying Treatments

Primary progressive MS patients ocrelizumab assessments

Surgical treatment for drug-resistant epilepsy - including EEG videotelemetry, intracranial EEG, epilepsy surgery: all inpatient

Thymectomy for myasthenia

Intractable cluster headache/ injection dependent primary headache

IVIg: CIDP or MG treatment

Post stroke rehabilitation

Percutaneous gastrostomy

Botulinum toxin injections

Links

1 https://www.rcplondon.ac.uk/education-practice/courses/effective-remote-consultations

2 https://www.rcplondon.ac.uk/news/towards-new-normal-physician-training-following-covid-19

3 https://www.rcplondon.ac.uk/news/supporting-clinical-academic-trainees-returnresearch?utm_source=Membership%20Support%20and%20Global%20Engagement%20&utm_medium=email&utm_campaign=11542398_Membership%20-%20COVID-19%20update%20-%2014.05&utm_content=supporting%20clinical%20academic%20trainees%20in%20return%20to%20research%20link&dm_i=1V19,6VE66,OY0DOJ,RKWOF,1

4 https://www.theabn.org/resource/collection/65C334C7-30FA-45DB-93AA-74B3A3A20293/ABN_Guidance_on_DMTs_for_MS_and_COVID_19_VERSION_18_May_FINAL.pdf