BASCIS GUIDANCE ON MANAGEMENT OF SPINAL CORD INJURY PATIENTS DURING CORONAVIRUS (COVID-19) PANDEMIC

1. INTRODUCTION

The British Association of Spinal Cord Injury Specialists is aware of the considerable challenges raised by the COVID-19 pandemic. This has raised understandable concerns among medical and non-medical colleagues. Our patients are plausibly going to be anxious, as many of them fall into the vulnerable high-risk category. It is essential at this time that we do everything to protect our patients and ourselves. A healthcare worker infected with COVID-19 is not only at significant risk of personal harm, but risks spreading the disease to patients and are unable to be part of the healthcare workforce. The use of appropriate PPE is integral to the delivery of good clinical care. We are also aware that there have been significant changes to service delivery within the Spinal Injury Centres and that there has been a disruption of normal patient transfer pathways.

Spinal cord injured patients, especially those with higher levels of spinal cord injury generally have a greater baseline risk of developing respiratory complications and sepsis-related complications as a result of altered respiratory tract physiology. This is because of the multisystem dysfunction, especially respiratory system dysfunction (loss of chest wall muscles and inability to cough) associated with spinal cord injury. These individuals are also, therefore, at heightened risk of developing complications associated with COVID-19 infection. The presence of higher than average incidence of medical comorbidities and the greater incidence in the elderly population who have sustained a spinal cord injury increases the risk further.

This guidance should be treated as preliminary guidance and will be updated as and when necessary.

2. ELECTIVE ADMISSIONS

We recommend that all admissions to Spinal Cord injury Centres for elective procedures be delayed to release beds and to reduce the likelihood of cross-infection of patients. Only urgent or unavoidable procedures such as baclofen pump replacements and drainage of infected collections should be considered. All elective scans such as renal surveillance, ultrasounds should be postponed unless clinically indicated. Where planned admissions have been cancelled, efforts should be made to support such patients with advice helpline, telephone outreach support and other measures.

3. OUTPATIENT PROCEDURES AND APPOINTMENTS

Wherever possible face-to-face outpatient appointment should be avoided and be replaced with telephone or video appointments. We recognise that there will be a small percentage of patients who still need to be seen in the clinic. Such appointments should be kept to a minimum and appropriate PPE precautions should be used based on individual risk assessment and local policies.

There will be some outpatient procedures that will still need to continue such as refill of baclofen pumps. Such appointments should be staggered to minimise contact between patients and to avoid crowding in waiting areas. Suitable PPE should be used during such procedures. There should be a designated area for isolating individuals who may present with suspected or overt COVID-19 symptoms attached to the outpatient area. Once isolated, they should be managed as per local protocols. Where resources permit, the possibility of carrying out procedures at the individual's house should be explored.

4. ACUTE PATHWAY

We recommend that patients on the acute spinal cord injury pathway should continue to be admitted to spinal cord injury centres without delay using the national referral and admission system. Timely transfer to spinal injury centres not only allows acute hospital beds to be freed up, but it also ensures that spinal cord injured individuals are treated in appropriate clinical areas, thus minimising complications. We recognise that there can be local demands for beds at spinal cord injury centres to be used for non-spinal patients. However, as such use stops the functioning of the spinal cord injury pathway leading to backlogs in acute hospitals, BASCIS recommends that any such use be highlighted to the Spinal Services Clinical Reference Group (spinal services CRG) and NHS England Specialist Commissioning.

Outreach assessments from the Spinal Injury Centres should be conducted telephonically or through video links. We do not recommend physical outreach visits currently.

Immediately prior to the transfer of SCI patients, it should be ensured that patients do not have any symptoms of COVID-19 infection. If such symptoms are present, the transfer should be delayed until the diagnosis has been established through appropriate tests. We do not recommend testing of asymptomatic patients. SCI patients with COVID-19 infection should be transferred to designated COVID-19 isolation areas in individual centres or to designated areas agreed locally / nationally.

Once patients are transferred to the Spinal injuries Centre, in the absence of a specific test to rule out asymptomatic carriage, the patient should be treated in single rooms or a specific bay for seven days. If patients demonstrate symptoms of COVID-19 infection at the time of transfer, they should be isolated and treated as per local protocols. We do not believe that transfers of medically fit SCI patients should be delayed. Beyond the seven-day period, asymptomatic patients can undergo specialised rehabilitation interventions normally.

5. REHABILITATION INTERVENTIONS

As the majority of patients at most spinal injury centres are now tetraplegics, they will require regular respiratory physiotherapy and interventions to minimise respiratory complications. This will involve a variety of procedures including manual assisted coughing, use of cough assist machines and nebulization among others. In most spinal injury centres there will also be a group of ventilated patients and patients with tracheostomies, who will more likely than not have uncuffed tracheostomy tubes. The respiratory interventions and the presence of uncuffed tracheostomy tubes can be considered to be aerosol generating procedures (AGP). Precautions recommended for AGP should be used by staff caring for such individuals. When respiratory interventions are being undertaken, cuffing of tracheostomy tubes to reduce aerosolisation should be considered.

Although nebulisers can be considered to be non-aerosol generating as per PHE guidance, we would consider it good practice to replace nebulisers with alternatives such as inhalers and spacehalers where possible.

Where multiple ventilated patients are managed in a specific bay, a reverse barrier approach intended to minimise transmission of infection to patients from staff should be employed.

6. RESUSCITATION AND ESCALATION

The discussion should be had with the patient about their wishes in the event of clinical deterioration as soon as possible after admission. Escalation of treatment should be based on the likelihood of success, presence of comorbidities and overall frailty. The decisions should be made on an individualised basis. Frailty scores relying on physical functioning measures are not appropriate to be used in individuals with spinal cord injury and other neurological impairments.

7. VISITORS

We recommend that visitors should be minimised or stopped altogether. This is to minimise the risk of introduction of COVID-19 infection to this high-risk group. We recognise that although this is contrary to normal practice, it offers the best chance of protecting patients and is in keeping with local/national guidelines. Communication using video links/messaging apps should be supported.

8. COMMON AREAS AND MDT WORKING

We recognise that changes will be required to therapy and nursing routines during this period. The use of common areas such as therapy gyms and dining rooms may need to be avoided to maintain social isolation. If such areas are being used, it should be ensured that the number of people in the room is kept to a minimum and that sufficient distance is maintained between patients. The equipment and the clinical areas should be decontaminated between patients.

Group meetings of staff should be minimised or avoided. We suggest the use of conferencing/remote working apps to conduct MDT meetings.

9. PERSONAL PROTECTIVE EQUIPMENT (PPE)

We endorse the guidance from Public Health England (published April 2, 2020), joint guidance from the Royal College of Anaesthetists and the Faculty of Intensive Care Medicine on the use of personal protective equipment. We also endorse the recommendations from ENT UK on precautions to be taken when undertaking aerosol-generating procedures.

10. DISCHARGE AND STEP DOWN

We are of the view that patients who have completed their rehabilitation should be discharged as soon as possible, including if necessary to step down beds that are identified locally or nationally.

11. INDIVIDUALS LIVING AT HOME

For spinal cord injured individuals living in the community, every attempt should be made to maintain social isolation. The possibility of converting care packages which involve multiple daily care visits to live-in care packages should be considered. This will minimise the risk of infection spread from carers. We, however, recognise that this may be very difficult to achieve in the current situation. If family members wish to support the care package to minimise the risk of exposure from carers, this should be encouraged in the short term.

We also recommend that suitable PPE should be used when caring for individuals in the community, as COVID-19 is now endemic in the UK.

12. READMISSIONS

If patents are readmitted for urgent or unavoidable procedures to spinal injury centres from the community, protocols similar to the transfer of patients from other hospitals should be followed. The patient should be isolated from other patients in the Centre for seven days in single rooms or cohort areas. Surgical procedures and other interventions should be undertaken with appropriate PPE protection as per local protocols.

13. CHILDREN WITH SPINAL CORD INJURY

It is not known yet whether some children may be at higher risk for severe illness, for example, children with underlying medical conditions and special healthcare needs. Although the non-specific guidance from government and experts is that children of any age with neurological conditions are more likely than other children to be affected, this does seem to be related to how their general health and breathing function is rather than illness. All families of children with spinal cord injury who have chest and breathing changes due to their level of injury should already have the knowledge and equipment to ensure they can clear their chest and use all breathing equipment prescribed to keep them as well as possible. These children should be considered in the vulnerable group as identified by the UK government. UK.gov information on social isolation should be followed. Carers are an essential part of the team and need to use all elements of good infection control practice to reduce the risk of infection.

COVID-19-19 symptoms may present slightly differently in children. The symptoms experienced with COVID-19-19 are often symptoms of other illnesses as well. Children and their parents should be encouraged to contact emergency services if children with SCI develop COVID-19 related symptoms. It is expected that paediatric SCI patients will be treated in local paediatric hospital/pathways using local paediatric protocols.