

Specialty guides for patient management during the Coronavirus pandemic

Clinical guide for the management of patients requiring spinal surgery during the Coronavirus pandemic

19 March 2020

“...and there are no more surgeons, urologists, orthopaedists, we are only doctors who suddenly become part of a single team to face this tsunami that has overwhelmed us...”
Dr Daniele Macchine, Bergamo, Italy. 9 March 2020

As doctors we all have general responsibilities in relation to COVID-19 and for these we should seek and act upon national and local guidelines. We also have a specific responsibility to ensure that essential trauma and orthopaedic care continues with the minimum burden on the NHS.

We must engage with management and clinical teams planning the local response in our hospitals. We may also need to work outside of our specific areas of training and expertise and the GMC has already indicated its support for this in the exceptional circumstances we may face: <https://www.gmc-uk.org/news/news-archive/how-we-will-continue-to-regulate-in-light-of-novel-coronavirus>

Spinal services may not seem to be in the frontline with COVID-19, but we do have a key role to play and this must be planned. In response to pressures on the NHS, the elective component of our work may be curtailed. However, the non-elective patients will continue to need care. We should seek the best local solutions to continue the proper management of these emergency and urgent patients while protecting resources for the response to COVID-19.

In addition, we need to consider the small possibility that surgical facility for emergency surgery may be compromised due to a combination of factors including staff sickness, supply

chain and the use of theatres and anaesthetic staff to produce ITU pods. This is an unlikely scenario, but plans are needed.

Spinal surgical patients can be considered in a few categories:

1. **Emergency in-patients:** continue to require admission and conservative or surgical management, eg cauda equina, spinal trauma with abnormal neurology, spinal infections, metastatic spinal cord compression. **We must expedite treatment to avoid pre-op delay, and expedite rehab to minimise length of stay.**
2. **Urgent Elective Care:** patients with spinal conditions that may lead to neurological deterioration if not operated on in the near future, eg myelopathy. **We must prioritise and operate at a reasonable period of time.**
3. **Routine Elective Care:** patients with stable spinal conditions that can continue a conservative approach and be operated at a later date.
4. **Day-cases:** surgery can be safely undertaken for a number of procedures such as discectomy and injections for severe radicular pain. **Provision for day-case surgery must be made. Please use the following guidance regarding steroid use in spinal injections:** <https://ukssb.us14.list-manage.com/track/click?u=de6171e0ef375ef2e0bc53902&id=8c22d9f58d&e=28100d896c>
5. **First contact and clinics:** outpatient attendances should be kept to the safe minimum. As many patients as possible should be offered telephone clinics.

When planning your local response, by service area, please consider the following:

Leadership

- A consultant must be designated as 'lead consultant'. This duty can be for one day, a few days or even five days in small units. This is an essential role during crisis management. It cannot be performed by the consultant 'on-call' or the consultant in clinic or the consultant in theatre. They must be free of clinical duties, and the role involves co-ordination of the whole service from emergency department (ED) through to theatre scheduling and liaison with other specialties and managers.
- **A leadership team should support the lead and include relevant members of the multidisciplinary team (MDT).**
- Establish a daily sitrep and dashboard with critical data to share across the workforce. That should include patient flows, workforce issue, stock levels and other

key messages (eg state of Coronavirus response, personal protective equipment (PPE) requirements).

- It can be very stressful during a crisis. Support each other and share the workload. Do not expect the clinical director to do all the co-ordination!
- Identify pathways that require actions outside normal provider pathways including contingency plans for supply chain issues.

Outpatients

- Routine follow up outpatients can be managed by cancellation, delay, remote management, or still require face-to-face attendance. Principles should be to reduce travel to provider organisations while maintaining continuity of care. Where patients do need to attend, consider the issues such as route to clinic, waiting areas and crowding.
- As the system comes under more pressure, these risk assessments will need updating.
- Consider the issues of provision of supporting diagnostics, eg phlebotomy, imaging or medications to minimise risk.
- Appropriate outpatient care may reduce the burden on the non-elective NHS. Rapid access clinics may prevent admissions or support discharge.

In patients including elective and non-elective

- Establish discharge planning at the start of an admission process.
- Across an organisation identify services to support rehabilitation and discharge to maintain capacity.
- During the Coronavirus crisis, triage elective admissions to:
 - avoid unnecessary admission
 - reduce exposure of the individual to a hospital environment
 - free-up beds for more urgent cases.
- Increase use of same day or day cases procedures where elective activity is still required.

Specialist pathways

- Individual departments should consider other specialist pathways that need additional work to maintain activity as safely as possible.
- **EDs will change their system and will use triage at the front door and stream patients directly to inpatient areas before examination or diagnostics.** Consider

in-reach services that are consultant-led to pull patients needing admission to inpatient areas or facilitate rapid discharge to the community.

- **Identify and upskill staff to support other areas to release staff to manage Coronavirus cases.** While not every clinician will feel they have the skills to manage every situation they have important roles in supporting the system. That should be recognised and supported as clinical teams move into unfamiliar areas. Consider simple training refresher courses to reinforce skills.
- **Principles**
 - We should avoid unproductive attendances at hospital.
 - Senior decision-making at the first point of contact should reduce or even prevent the need for further attendances.
 - A decrease in elective work will allow for a greater senior presence at the front door.
 - Clinicians may need to work in unfamiliar environments or outside of their sub-specialist areas. They will need to be supported.
 - Provide simple clear communication within your teams.
 - Plan for the next stage and consider potential scenarios ahead of time.
 - The risk-benefit analysis of everything we do will change and evolve during this pandemic.

	Prevalence of Coronavirus:			
	Low	Medium	High	Very high
Impact on organisation	Normal winter pressures Business as normal	Limited ITU Limited bed capacity	No ITU, emergency ITU in operation	Escalation to ITU restricted
Phase	Prepare to respond	Reduce/stop routine activity	Redirect resource to emergency activity	Major incident
Elective in patient activity	Identify activity	Reduce activity	Stop activity	
Non-elective inpatient activity	Upskill staff Plan reallocation of staff to support emergency activity	Twice daily consultant-led ward reviews Enhance rapid discharge planning Establish discharge clinics to facilitate	In reach to ED/MAU to pull emergency activity away from front door Escalate discharge processes	Consider triage criteria
Outpatients	Identify activity	Delay follow ups Identify diagnostic support services Commence remote access clinics	Increase discharge clinic capacity to support discharge planning	Consider staff step-down options while maintaining activity to maintain staff resilience Deploy medical students and physician aides to support OP activity

Most elective spinal surgery can be delayed until further notice with minimal risk to the patient. There are, however, specific conditions under which a delay could lead to permanent neurological deterioration.

The decision to escalate or de-escalate stages of spinal surgical provision should be taken locally by an organisation.

Stage 1 (Emergency and urgent elective care)

In the event that pressures/preparations require cancellation of routine elective surgery:

- All elective spinal surgical waiting lists should be reviewed by the responsible consultant to identify those patients at risk of neurological deterioration.
- The consultant should contact all urgent patients identified on their waiting lists and a date for surgery planned.
- All patients, who do not have a risk of neurological deterioration, should not undergo surgery at this time.
- Emergency surgery should continue without restriction.

Likely Conditions:

Cervical myelopathy, thoracic myelopathy, intradural tumours, bilateral sciatica with confirmed radiological compression +/- motor weakness.

Stage 2 (Emergency Surgery Only)

Emergency Guidelines

- All referrals from non-spinal centres and spine partners to spinal hub centres should be reviewed by a consultant to ensure appropriate for referral.
- All patients requiring imaging (including MRI) should have this performed at their local hospital 24/7 to prevent inappropriate and unnecessary transfer of patients to spinal hub centres.
- Only patients requiring emergency surgery that cannot be treated locally should be transferred between hospitals.

Likely Conditions:

Spinal fractures, spinal infection, metastatic spinal cord compression, cauda equina, traumatic spinal cord injuries.

Stage 3 (Selective Emergency Spinal Surgery Only)

Only patients with ASA <3 who will not require Level 2 or 3 care post operatively and a reasonable chance of neurological recovery, with the following conditions:

Proven cauda equina syndrome

Fracture dislocated spines

Epidural abscess with deteriorating neurology

Patients with Metastatic Spinal Cord Compression should be treated oncologically/non-operatively and should not be offered surgery during stage 3.