Specialty guides for patient management during the Coronavirus pandemic

Clinical guide for the management of vascular surgery patients during the Coronavirus pandemic

Clinical guide for the management of vascular patients during the Coronavirus pandemic

20 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 Coronavirus and for these we should seek and act upon national and local guidelines. We also have a specific responsibility to ensure that essential Vascular Surgery care continues with the minimum burden on the NHS. We must engage with those planning our local response. As the wider healthcare response escalates, 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

Vascular Surgery may not seem to be in the frontline with Coronavirus, 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, urgent and emergency patients, will continue to need care. We may also be called upon to assist with the management of patients on ECMO. We should seek the best local solutions to continue the proper management of these patients whilst protecting key resources for the response to Coronavirus.

It is clear from experiences in other countries that there is a high probability that that healthcare provision in the UK will be severely compromised in relation to Coronavirus.

The expectation is that we will progress through stages of preparation, escalation, crisis, de-escalation and resolution, and then recovery before returning to normal practice. 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 a possible scenario and plans are needed.

Vascular surgery patients can be considered in a few categories:

1. **Obligatory in-patients:** Continue to require admission and surgical management e.g., acute & critical limb ischaemia, symptomatic aortic aneurysm & dissection, unstable carotid plaques. **We must expedite treatment to avoid pre-op delay, avoid or reduce critical care requirements as much as possible, and expedite rehab to minimise length of stay.**

2. **Day-cases:** Surgery can be safely undertaken for a large number of conditions. **Provision for day-case surgery must be made.**

3. **Non-operative:** Patients with conditions that can reasonably be managed either operatively or non-operatively. **We must consider non-operative care (temporizing or otherwise) if that avoids admission**

4. **ED contact and clinics:** Outpatient attendances should be kept to the safe minimum. **Switch to remote clinics where possible. Ensure consultant level decision making for ED admissions.**

When planning your local response, please consider the following:

**Leadership:**

- A consultant **must be designated as ‘lead consultant.’** This duty can be for 1 day, a few days or even 5 days at a time 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 in theatre. They must be free of clinical duties and the role involves coordination of the whole service from ED, OPD, theatre scheduling and liaison with other specialties and managers.
- It can be very stressful during a crisis. Support each other and share the workload. Do not expect the Clinical Director to do all of the coordination!
- Establish a daily sitrep and dashboard with critical data to share across the workforce. That should include patient flows, workforce issues, stock levels and other key messages (eg state of Coronavirus, response, personal protective equipment (PPE) requirements).

**Obligatory in-patients.**

- Length of stay (LOS) must be minimised - especially critical care LOS
- Decide as a group which patients will be categorized as emergent, urgent and non-urgent (e.g. on size / symptoms of aneurysm).
- Use elective theatre capacity and surgeons to ensure minimum pre-operative delay.
- Use elective rehab services to minimise post-operative stay.
- An anesthetic guideline for patients requiring surgery and who are positive for Coronavirus will be required.
- Determine whether patients normally managed in a critical care setting could be managed, with support, in less high dependency areas.
- Work with your networks to ensure balanced capacity across the region.
- Contingency plan for supply chain issues.
• Ensure end of life care / do not resuscitate decisions are in place for all appropriate patients

Day-cases
• A few vascular procedures may be clinically suitable to be performed as a day case.
• During the Coronavirus response, an increase in day-case surgery will:
  o Avoid unnecessary admission
  o Reduce exposure of the individual to a hospital environment.
  o Free-up beds for more urgent cases
  o Allow staff from elective theatres to continue working in a familiar environment
• During the Coronavirus response it is likely that the only elective day-case surgery occurring will be urgent cases. Careful prioritisation of day-case patients will be needed across both the elective and non-elective patients based on theatre/staff capacity.

Non-operative management
• A number of conditions can be managed either operatively or non-operatively. Clinical decisions during a serious incident must take into account the available facility for the current patient and also the impact this may have on the whole community.
• Consider increased utilization of endovascular techniques to reduce surgical and critical care burden.
• As the system comes under more pressure, there may be a shift towards endovascular and non-operative care.
• Non-operative care may reduce the in-patient and operative burden on the NHS.
• It may also protect the individual from more prolonged exposure in a hospital setting.
• It may free up beds for more urgent cases

ED first contact and clinics
• *Emergency Departments (ED) are likely to come under intense and sustained pressure and vascular surgeons can make an important contribution by reducing the ED workload so that clinicians in ED can focus on medical patients.*
• We should avoid unproductive attendances and admissions at hospital.
• No patient should be admitted without discussion with a consultant, and after exploring alternate options.
• Make use of telephone/remote clinics, especially for follow-up
• Consider delaying non-urgent appointments / repeat appointments
• Consider avoiding in-hospital dressings clinics and working with community nursing teams.
• Senior decision making at the first point of contact should reduce or even prevent the need for further attendances.
• Clinicians may need to work in unfamiliar environments or outside of their sub-specialist areas. They will need to be supported.
Vascular Surgery Escalation Policy

The Coronavirus pandemic is expected to put UK Health services under escalating pressure. Initially decision making may be within current ethical/practice standards. However, if conditions continue to escalate as has been seen in other countries decision making may be more extra-ordinary. **In these circumstances it is important that when decisions are made both the decision process and decision made is well documented.** At more normal working levels, the decision making may seem easy, at extraordinary working levels these decisions are difficult, staff will be under severe stress and it is well recognised that this will impact on staff mental health and resilience.

This framework is designed to support that decision-making process. The decision-making process should bring together available information, assess the risks, legal position, policies and procedures and then recommend and support shared decisions (individual clinician, organisation and (where appropriate) patients).

The phases of any incident response will overlap. Different hospitals and units may be at different stages at different times (although all decisions made should take account of the wider local, regional and national position). The table below should not be considered rigid (columns may overlap) and these are not mandatory instructions.

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Very high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td>Normal Winter Pressure</td>
<td>Limited ITU</td>
<td>No ITU Theatre ITU</td>
<td>Emergency surgery limited isolation limited</td>
</tr>
<tr>
<td></td>
<td>Business as usual</td>
<td>Limited beds/capacity</td>
<td>Theatre ITU pods</td>
<td>Isolation limited</td>
</tr>
<tr>
<td>Phase</td>
<td>Prepare to respond</td>
<td>Stop routines. Urgent &amp; Emergent only</td>
<td>Prioritise Emergent Major Incident</td>
<td></td>
</tr>
<tr>
<td>Vascular Operating</td>
<td>Normal</td>
<td>Emergent &amp; Urgent only. Shift to non-op/IR/ endovascular as able</td>
<td>Emergency only (eg. Aortic dissection, symptomatic or ruptured aneurysm) Consider ceilings of care</td>
<td>Consider post-op care outside of critical care</td>
</tr>
<tr>
<td>Consultant Coordinator</td>
<td>Early surgery to decrease LoS (using elective capacity) – <em>No pre-op delays</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective Operating</td>
<td>Normal except no vulnerable patients eg. ASA 1 only</td>
<td>Urgent only</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Vascular Clinic</td>
<td>Normal new patient Reduce follow-up</td>
<td>Virtual clinics where possible</td>
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</tbody>
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