COVID-19 virus and vascular surgery

27th March 2020

Dear Members

As expected, the situation continues to evolve and the COVID-19 (CV-19) pandemic is impacting both our patients and our colleagues. The NHS have released a Clinical guide for the management of vascular surgery patients during the Coronavirus pandemic


These guidelines are helpful and outline the general principles for care, but for many units, they are already outdated. These hospitals have had to implement escalation policies due to the high prevalence of COVID-19, with depletion of their ITU capacity so that only emergency surgery can be considered.

We need to continue to focus on prioritisation according to patient’s individual need, but also accept the hospital circumstances have changed and this will impact on clinical decision making. Principles include reducing unnecessary exposure to hospitals, deferring less urgent cases and reducing LOS or dependency on ITU.

As the spread of the virus follows that in other countries, some very difficult decisions are needing to be made. In these circumstances it is important that when decisions are made both the decision process and the decision made is well documented. We would recommend that when a decision is made to deviate from standard practice due to the increase risk posed to the patient due to the COVID 19 prevalence, the decision should be taken by 2 consultants. This does not necessarily need to be 2 Vascular Surgeons, it could be a Vascular Surgeon and anaesthetist or COE consultant.

Overall our recommendations for the management of Vascular patients during the COVID 19 pandemic are:

**Vascular surgery: Elective surgery and outpatients**

Most arterial surgery is either urgent or emergency in nature and should continue at present where possible.

*Outpatients:*
Where possible, only urgent outpatients should be seen, and virtual clinics should be considered.

On discharge, many vascular patients will either need no outpatient follow (but be given a telephone number to ring if in trouble) or can be reviewed in remote outpatient clinics.

*Elective surgery:*
Elective arterial surgery and venous surgery should be deferred.
Asymptomatic carotid surgery and surgery for claudication should be deferred.
The size threshold for AAA surgery needs to weigh up risk of rupture in the next few months with risk of intervention and resource limitation.
>7cm or imminent rupture AAA currently is recommended.

**Urgent/emergency vascular surgery**

*On call arrangements:*
A second on-call consultant is advisable to help with both the emergency workload (and also if self-isolation becomes common).

A vascular consultant surgeon should be on call and available to see all referrals. Trusts should consider having another vascular surgeon on call for delivering the surgery.

**Investigations**
Emergencies are likely to need a CT angiogram and proceed to surgery as appropriate.

**AAA:**
Ruptured aneurysms should ideally be treated by EVAR whenever possible to reduce dependence on the High Dependency Unit and reduce length of stay.
Open surgery should only be considered when EVAR is inappropriate or unavailable and in cases where there is a good chance of success.
ITU capacity will need to be considered prior to intervention.

**Critical leg ischemia / diabetic foot**
Those legs immediately threatened require urgent intervention.
Others may be diverted to a hot foot clinic for further assessment.

Interventional radiological approaches may allow more appropriate utilisation of scarce high dependency beds.

There may be situations where primary amputation may be more appropriate than complex revascularisations, multiple debridements and potential prolonged hospital stay.

**Carotids**
Crescendo TIAs would normally need urgent surgery. If there are severe resource limitations, aggressive best medical therapy more appropriate for recently symptomatic carotids.

**Spoke hospitals**
Spoke hospitals allow patients to be cared for outside the hub. Currently, vascular surgical input is in the form of ward referrals, venous work, outpatient clinics, and angioplasties. These activities will need to be reviewed. There will need to be local flexibility, but inpatient ward reviews, possibly in a virtual fashion may be appropriate.

**Trainees**
Surgeons in training will have keys roles to play in this crisis but the underlying principles of appropriate supervision, working practices, rest and pastoral care remain.

**Other specialties**
Supporting other vascular staff, other specialties, colleagues and health professionals is crucial in these difficult times and VS members will have key roles to play. Emergency departments, ITU, anaesthetics, respiratory and general medicine will be under enormous stress and local discussions as to how our vascular teams are best deployed will need to be constructively discussed without jeopardizing our patients.
Appropriate use of scarce resources
In a worst-case scenario, resources may be severely limited and careful discussions and dialogue with other specialties may be required in order to appropriately prioritise care. Local solutions will need to found and all potential providers may be appropriate.

Decisions to intervene on patients who will require ICU input post-surgery will need to be in line any national ventilation guidelines.

Documentation
Brief documentation in the patient notes of the circumstances surrounding a perceived deviation from best therapy will help support these decisions at a later date.

Personal safety
Appropriate staff protection, planning and preparation for procedures, and team dynamics have been identified as being key to patient and staff safety and again local guidelines should be adhered to. Following local/national guidelines on self-isolation should also be followed.

PPE update:
Care for your personal health and that of you team is key at this time and we strongly recommend that all clinicians follow the recommended guidelines for PPE.

In the recent Intercollegiate General Surgery Guidance on COVID-19, a number of recommendations are made including:

A: “Full Personal Protective Equipment (PPE) should be used for laparotomy….. Full PPE includes wearing visors or eye protection. It is imperative to practise donning and doffing PPE in advance.”

The VS is recommending full PPE for all arterial surgery and amputations.

B: Whilst in theatre
- Minimum number of staff in theatre
- Full protective PPE including visors for all staff in theatre
- Stop positive ventilation in theatre during procedure and for at least 20 minutes after the patient has left theatre
- Smoke evacuation for diathermy / other energy sources
- Patients are intubated and extubated in theatre – staff immediately present should be at a minimum.


Mental health well-being and burnout
This is likely to be the most challenging few months any of us have faced. Looking after colleagues, friends and co-workers over a sustained period of time is vital. Spending time with family and also talking, reflecting, eating, sleeping and exercising are key.

Research
NIHR is supporting COVID 19 research but all research is to be stopped unless patient safety is impacted.

VERN and the VS have set up a joint COVID based research project: the COVER Study (COVID-19 Vascular sERviceStudy). We would encourage all units to consider signing up.
Clinical training / education
This is likely to heavily impacted. Remote or virtual meetings will become important. The next sitting of the final Fellowship has been cancelled.

Audit
Continued completion of the NVR remains critical.

Vascular Society and support
Local solutions are likely to most important, but the Vascular Society will try to offer support and can be contacted by email.

The VS are now holding weekly virtual Executive Council meetings. Please contact Sophie Renton (secretary@vascularsociety.org.uk) if you feel there are issues that we should discuss.

Other support

Colleagues at all levels will need to consider how they can contribute within their competencies and current GMC guidance. https://www.rcseng.ac.uk/standards-and-research/gsp/duties-of-a-doctor-registered-with-the-general-medical-council/

Yours sincerely

Professor Chris Imray, President of the Vascular Society of Great Britain and Ireland