Vascular Surgery Training

A summary and guidance for radiology trainers and trainees

Introduction

Vascular medicine is rapidly changing. Service reconfigurations are taking place around the country, primarily because of evidence that volume = outcome for a wide variety of procedures and because of the need to offer 24/7 on-site access to emergency vascular surgery and interventional radiology. With the move towards larger volume units, vascular surgeons and interventional radiologists will have to agree upon which model best serves patients, bearing in mind the need for a patient to have access to a specialist consultant IR and VS 24/7. Within any model for delivering services and attracting trainees is a fundamental commitment to offer high quality training to vascular surgery and interventional radiology trainees.

Interventional radiology and vascular surgery have made very significant changes to status and training in recent years. Interventional radiology (IR) gained subspecialty status in 2010 and a new training curriculum was introduced. In 2012, vascular surgery became a specialty, independent of general surgery. The Royal College of Radiologists (RCR), British Society of Interventional Radiology (BSIR) and the Vascular Society of Great Britain and Ireland (VS) worked together to ensure that each organisation supported and endorsed the respective applications. We published a joint statement in 2012 reflecting this support.

The new vascular surgery curriculum is intended to enable vascular surgeons of the future to contribute more flexibly as practices change. There will still be an increasing requirement for more IR trainees to be trained in the full spectrum of Interventional procedures.

The new vascular surgery curriculum is intended to enable vascular surgeons of the future to contribute more flexibly as practices change. There will still be an increasing requirement for more IR trainees to be trained in the full spectrum of Interventional procedures.

We know that the introduction of the new vascular surgery training programmes has caused difficulties and concerns for radiologists in some places, indeed it was recognised early in the process that capacity would be potentially problematic. The RCR/BSIR/VS agreed that IR training should not be compromised by the introduction of the VS curriculum. This paper gives an update for radiology trainers and trainees on the current position.

Curriculum

Limited vascular interventional radiology and imaging competences pertaining to vascular intervention were included in the new vascular surgery curriculum in 2012 to enable vascular surgeons to be trained in endovascular stent-grafting for aortic aneurysms and angioplasty to allow delivery of such devices, in addition to open vascular surgery.

The initial training period for vascular surgery trainees contains generic skills. Endovascular training, to the agreed competency levels, occurs through the training period from ST5-ST8.

The VS, RCR and BSIR agreed minimum competencies for a defined number of procedures/interventions in the new curriculum. They were selected so that there was a realistic opportunity of them being met within the confines and duration of the new training programme. The current GMC-approved (2012) curriculum reflects these agreements.

A minority of vascular surgery trainees may wish to acquire more complex interventional radiology technical skills beyond the new curriculum. It is envisaged that these could only be achieved as part of a post CCT fellowship.
Competencies for image interpretation for vascular imaging

The practical requirement is for vascular surgery trainees to be competent in reviewing images of the vascular system in order to enable them to make appropriate initial management decisions based on this image interpretation. It is not envisaged that vascular surgery trainees will provide formal detailed imaging reports of scans, including assessment of the extra vascular aspects of the anatomical area imaged. Formal scan assessment and reporting will remain the remit of radiology. The delivery of this training should be a matter for local discussion but as an example it may be possible to deliver this during the time the vascular surgery trainee spends within the IR department, rather than through additional formalized diagnostic radiology sessions.

Vascular Surgery Training Programmes

Currently there are 15 training programmes established by the vascular surgery specialty advisory committee (SAC) and approved by the GMC. Some training programmes have incorporated training units from more than one LETB/deanery, to improve the overall quality of training. The latest full list of approved programmes and locations can be found on the GMC website here.

The original agreement between the Vascular Society, BSIR and the RCR specified that all applications for vascular surgery training programmes should have the support of the local training programme directors (TPD) for both vascular surgery and radiology, in order to be clear that there was capacity for the IR aspect of the training. Such support should be obtained prior to appointment to training posts, to ensure that capacity exists to deliver training that does not compromise IR training.

Numbers of Vascular Surgery Trainees

In 2013 20 trainees were appointed across the UK. This number was agreed between the RCR, the BSIR and the Vascular Society, recognising that there might be a small increase in training numbers in future.

An additional 35 trainees, who were training in vascular techniques under the old general surgery curriculum, have been required by the GMC to move onto the new vascular surgery curriculum. This had not been anticipated by the VS, RCR or BSIR. HEE have now decided to increase the numbers to 28 per year for England from 2016.

The first vascular surgical trainees on the new curriculum commenced training in the vascular IR aspects in autumn 2015.

Supervision and assessment of vascular surgery trainees

Competency in endovascular skills is assessed by workplace-based assessments (WBAs) in common with all aspects of the curriculum. Progression through all aspects of the curriculum is assessed through the ARCP process. It is reasonable for IR trainers to become Clinical Supervisors (CS) and assess trainees through appropriate WBAs and CS reports, as long as appropriate time is allowed for this in job plans.

Impact on the provision of training for radiology trainees

Radiology training programmes should only provide training to vascular surgeons where they can be confident that this can be done without detriment to the training of radiology trainees, including ensuring adequate exposure to vascular techniques to both core and sub-specialty trainees.

Failure to attract and train interventional radiologists will have a negative impact on a wide group of patients, not just those with vascular disease, in both the short and long term. Any reduction in training opportunities for interventional radiology trainees reduces the potential for them to achieve competence in other aspects of intervention vital for the provision of 24/7 services such as haemorrhage control, nephrostomies and other drainage procedures as well as delivery of acute stroke and interventional oncology services.

Training programmes might agree reciprocal arrangements whereby vascular surgery units provide training in arterial exposure, ward round and outpatient clinical decision making skills to IR trainees, however this may be of limited potential where IRs already deliver this training. This kind of mutual collaboration benefits both specialties and will promote flexible
working practices to optimise patient care in the future. Local TPDs and IR/VS trainers should meet and determine how these aspects of training can be incorporated into the local IR training programme.

It is in the interests of both specialties, and patients, that a collaborative approach is taken to the vascular surgical/interventional radiology service and training. It is recommended that heads of school and training programme directors establish formal cross-specialty training agreements with their deans defining the extent of this collaborative training, the training capacity including numbers of trainees, and training opportunities.

**Simulation Training**

Simulation can support initial training for VS & IR trainees but will not provide the whole solution. Vascular surgical simulation courses are being set up and the Vascular Society has indicated that interventional radiology trainees would be welcome to attend relevant sections on application, if there is capacity.

**Suggested actions in event of problems**

If the demands for vascular surgery training are putting the training of radiologists at risk in any programme, the following actions are suggested for heads of school or TPDs:

Talk to the vascular surgery TPD and head of school of surgery. A mutually respectful and cooperative way of working together, with regular discussion, is clearly the ideal way to avoid problems.

Take it up through the local training hierarchy. Initially the local postgraduate dean, but if necessary the LETB Director of Education and Quality (in England). Request a deanery visit.

Inform the RCR via gatraining@rcr.ac.uk. The RCR and BSIR have regular liaison meetings with the VS and it is very helpful to know what is happening in practice around the country. We can also raise matters at a national level, for example with the GMC. Equally we would welcome hearing about good practice.

If there is a negative impact on the service, and/or patients are at risk, take this through the trust/board governance system via clinical directors for radiology & VS and the trust/board management.

September 2016