

Applying to vascular specialty training in the UK: 12 tips for success

AD Jones Vascular ST⁴

MA Waduud BHF Clinical Research Fellow in Vascular Surgery²

J De Siqueira NIHR Clinical Lecturer²

DA Russell Consultant Vascular Surgeon^{1,2}

D Julian A Scott Professor of Vascular Surgery^{1,2}

¹Leeds Vascular Institute, Leeds General Infirmary,

Leeds Teaching Hospital NHS Trust, Leeds, UK

²Leeds Institute for Cardiovascular and Metabolic Medicine, University of Leeds, Leeds, UK

From preparation to accomplishment, maximise your chances of a career in vascular surgery.

While application rates are falling, vascular and general surgery remain two of the more competitive specialties, with a competition ratio of 1.54 applicants per post.¹ The competition ratios for both are combined, so it is difficult to establish the figure for vascular surgery alone. Given that in the 2018 round of recruitment 30 places were available nationally, the true figure for vascular surgery is probably much higher. To obtain a vascular national training number in the desired region, preparation should begin well in advance. The structure of the interviews and the organisation of portfolios has been covered previously.^{2,3} This article provides insight from the early stages of considering a career in vascular surgery to maximising the chances of success.

TIP 1: PLAN TRAINING ROTATIONS

Early exposure to vascular surgery and allied surgical specialties (general surgery, plastics, orthopaedics) is vital. As a medical student, aim to select jobs that place surgical specialties relatively early within foundation training, as this ensures surgical experience prior to the core surgical training (CST) interviews. While a vascular rotation within foundation years may be desirable for exposure, it is not essential; the emphasis should be on forming a broad base of relevant surgical knowledge. When ranking rotations for CST, ensure that the jobs provide maximum relevant exposure. A minimum of 6 months of vascular experience is required to apply for specialty training, although 12 months is preferred.⁴ As the interviews for general and vascular surgery are run jointly, prospective candidates should expect to be asked questions relating to general surgery. General surgical experience within core training is therefore also vital; in particular, points are allocated within the portfolio based upon general surgical index procedures. These include abscess drainage, laparoscopic appendicectomy, open hernia repair and open/closed laparotomies. Level of competency attained

is as important as absolute numbers performed. If you have a strong academic CV you could consider applying for an academic clinical fellowship in vascular surgery, which, if successful, ensures run-through training after foundation training.

TIP 2: LEARN FROM OTHER TRAINEES AND A SENIOR SURGEON

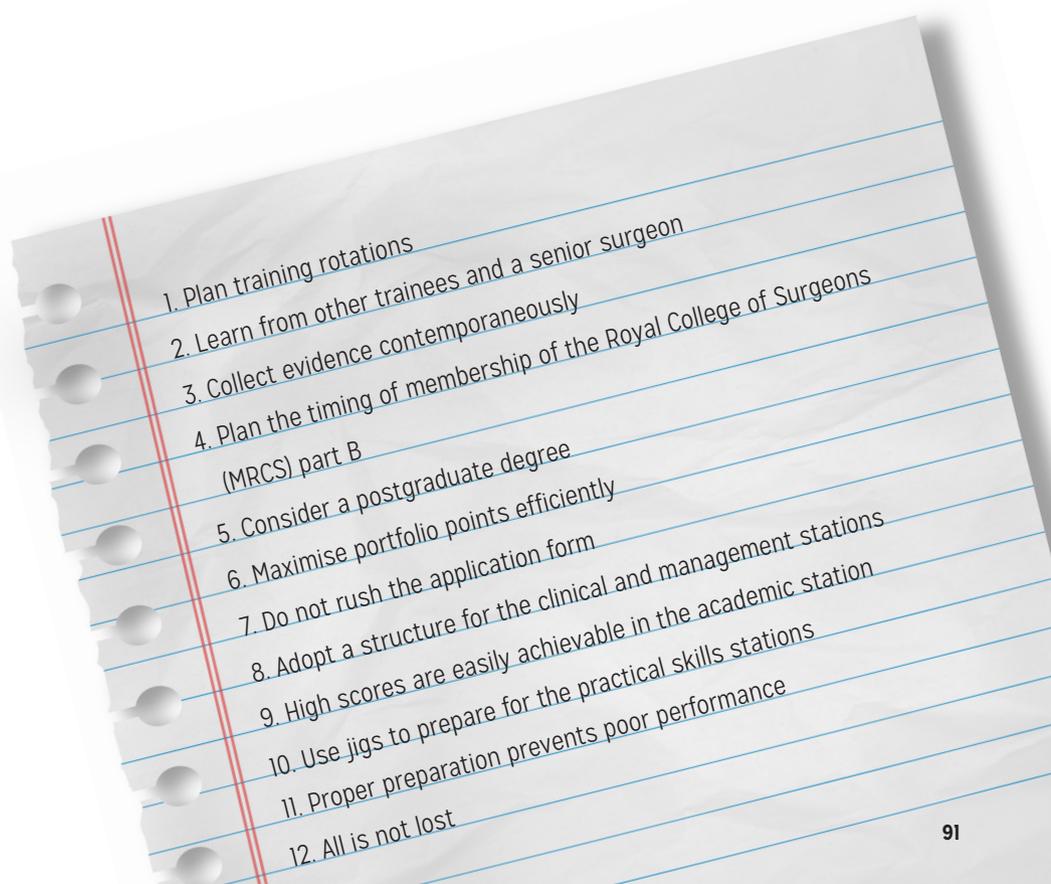
The best resources for identifying the most suitable CST jobs are from previous trainees. Every vascular department is different and each has its own strengths and weaknesses with respect to training. Departments within district general hospitals often provide excellent broad-based, hands-on operating experience, although they may be limited in the way of research opportunities. Rotations within university teaching hospitals tend to provide ample academic exposure, although operating lists are often competed over by senior registrars and fellows. The key is to identify your objectives and locate the best hospital to provide these opportunities within the region. Those with the best knowledge are

the current trainees. If applying to a region that is unfamiliar, useful contacts may lie within the Rouleaux Club, the UK Vascular Trainees' Association.

Similarly, identify a mentor as soon as you have decided that a career in vascular surgery is right for you. Ideally, you should identify someone with experience with the vascular specialty recruitment process, who will be able to give you objective advice. Go over your CV with them and identify deficits which may need addressing prior to your application.

TIP 3: COLLECT EVIDENCE CONTEMPORANEOUSLY

Without evidence, claims made within the portfolio can be challenged. Often, this may only be a letter from a lead consultant specifying a candidate's role within a project or contribution to medical student teaching. Contacting supervisors early will allow them time to respond. The specialty recruitment site provides guidance on portfolio preparation, including examples of acceptable evidence.⁵



1. Plan training rotations
2. Learn from other trainees and a senior surgeon
3. Collect evidence contemporaneously
4. Plan the timing of membership of the Royal College of Surgeons (MRCS) part B
5. Consider a postgraduate degree
6. Maximise portfolio points efficiently
7. Do not rush the application form
8. Adopt a structure for the clinical and management stations
9. High scores are easily achievable in the academic station
10. Use jigs to prepare for the practical skills stations
11. Proper preparation prevents poor performance
12. All is not lost

TIP 4: PLAN THE TIMING OF MEMBERSHIP OF THE ROYAL COLLEGE OF SURGEONS (MRCS) PART B

Passing MRCS part B is a requirement to complete CST and start specialist training. The benefit of passing the MRCS part B early within training is that all focus can be placed upon improving the portfolio and preparing for the interview. However, the MRCS part B is a structured verbal and practical examination testing the ability to integrate knowledge into surgical practice; it therefore has some overlap with the vascular national selection interview. Consequently, if sitting the examination later in training, preparation will be transferable to the interview.

TIP 5: CONSIDER A POSTGRADUATE DEGREE

A postgraduate degree can set your CV apart from others with similar experience. Not only does it increase the portfolio score, but it provides opportunities to produce work that can lead to presentations and publications. For those interested in medical education, an MSc degree in this area can increase portfolio points in both academic qualifications and teaching experience. Further degrees, such as the University of Edinburgh MSc in Surgical Sciences, can be undertaken part time and remotely and can therefore be performed alongside training.

TIP 6: MAXIMISE PORTFOLIO POINTS EFFICIENTLY

Allocation for points in the portfolio station is in the public domain and has been outlined in previous publications.³ Candidates should identify the aspects they can improve within the time available. Research articles, from conception to publication, can often take over a year. Successfully obtaining points within the publications and presentations section can be made easier by selecting the right type of project. Beginning a project requiring patient involvement and prospective data collection requires time both in planning

and obtaining ethical approval and in the execution. In contrast, systematic reviews require no ethical approval and require no new data collection, aside from assimilating evidence from previous work. The process will also significantly improve critical analysis and statistical knowledge crucial for the academic station.

Organising and delivering a regional course can often be done in a few months and may be an efficient way to attain portfolio points; organising a regional teaching course also demonstrates your management ability and can increase a portfolio score within the management, leadership and teamwork section. Foundation year programmes often facilitate a regional teaching programme for which funding may be obtained. This ensures courses are often free to the attendees and local trusts are more willing to provide administrative staff to aid organisation. Lastly, attending courses as a delegate can be an expensive but undemanding way to accrue portfolio points and can be done in a relatively short amount of time.

TIP 7: DO NOT RUSH THE APPLICATION FORM

Exams require months of preparation and a systematic approach to covering the various topics, and the approach to the vascular specialty training year 3 application should be no different. Time should also be allowed to complete the Oriel application. The job advert is usually posted towards the end of January and candidates are able to apply over approximately a one-month period. You will be asked to confirm the required achievements (ie General Medical Council registration, MRCS) and three referees must be supplied, with one of these being a current supervisor. The application form also contains an additional information section where candidates are asked to list all achievements outlined within the portfolio. This includes summarising an operative logbook with total number of cases and detailing whether supervised-trainer scrubbed/unscrubbed or performed, as well

as number of work-based assessments and level achieved for general surgery index procedures. In preparing for the application, it is also vital to understand the role that is being applied for; the vascular surgery curriculum gives insight into the expectations on trainees and the competencies required throughout training.⁶

TIP 8: ADOPT A STRUCTURE FOR THE CLINICAL AND MANAGEMENT STATIONS

The stations are: portfolio, academic and technical skills, clinical and management and professional communication. The online resources available break the interview down into its constituent parts and provide a solid basis for practice and further reading.

The scenarios presented, whether management or clinical, are multifaceted and your answers should reflect that. Begin by outlining clinical and non-clinical aspects; the latter can include organisational and educational points. This ensures that the interviewer knows that you are aware of all aspects of the scenario even if time runs out before they are discussed. The communication station can be overwhelming as, commonly, candidates are expected to assimilate information and present a management plan for multiple patients. Again, a structure is important to work through the patients and to communicate management plans effectively. The preparation time should be used to categorise each patient into: 1) for theatre; 2) potential for theatre, awaiting investigations; 3) unwell (critical care escalation); 4) potential discharge. Begin the telephone conversation with a summary before delving into each individual patient. Candidates should remember that they are interviewing for a position as a specialty registrar, so presenting vignettes and expecting the consultant to give a plan is unlikely to lead to high scores. Rather, propose how each patient should be managed. If there are uncertainties about a management plan, it is reasonable to discuss this as in a real-life situation.

However, attempting to 'bluff through' will be identified and probably penalised.

TIP 9: HIGH SCORES ARE EASILY ACHIEVABLE IN THE ACADEMIC STATION

Candidates are asked to summarise an abstract and answer questions pertaining to it and research methodology in general. Many of these abstracts arise from recent *British Journal of Surgery (BJS)* articles. Spend time analysing the abstracts from the last 12 months of *BJS* issues, as there is a reasonable chance that one may appear on the day. Practise verbally summarising the abstract within a short period of time and be prepared to answer any question that may arise. The online resources available do not provide an exhaustive list of potential questions, but they do offer a useful starting point. *Medical Statistics at a Glance* provides useful further reading.⁷

TIP 10: USE JIGS TO PREPARE FOR THE PRACTICAL SKILLS STATIONS

Traditionally, candidates find vascular skills, (either arteriotomy and closure or patch plasty) the most challenging technical station. A well-prepared candidate can therefore score highly. Your local vascular unit may have a dry lab for you to use for practice. If not, a number of websites sell vascular grafts and jigs that will replicate the artificial vessels used in the interview. Also consider liaising with theatre managers, who may have a collection of vascular grafts and sutures that are past their use-by date. Candidates will be questioned on the theory behind the skill tested, so make sure you remember which direction the needle should be taken through a vessel and to deliver heparin prior to clamping.

TIP 11: PROPER PREPARATION PREVENTS POOR PERFORMANCE

There is no substitute for practising stations with consultants who are familiar with the interview process. Learning how to structure answers is vital; however, this is for nought if a candidate is unable to communicate

effectively. Organise mock interview sessions with other candidates, consultants in your department and even family and friends.

Such scenarios will simulate the high-pressure environment felt on the day. Liaise with previous trainees, it is possible that some units are known to provide excellent local training sessions.

Numerous courses are available to aid preparation for the interviews, for example the Dundee Institute for Healthcare Simulation and the Royal Society of Medicine both offer two-day interview courses for general and vascular surgery. It is unwise to use these to begin preparation. Candidates attending courses who are poorly prepared will find their anxiety levels increased and it may be detrimental to performance at the actual interview. These courses revolve around the format of the interview and the basics of how to approach the stations. In contrast, if you have prepared for the course you will have the opportunity to fine-tune your interview technique and pick up tips. This approach will give you greater confidence with the actual interview.

In addition, prepare the logistics of the day well in advance, book train tickets, stay within a reasonable distance of the interview centre the night before and plan the route to the venue. The interview is a demanding process and additional stressors due to transport delays may be the difference between an excellent or a mediocre performance.

TIP 12: ALL IS NOT LOST

One-third of candidates are unsuccessful at interview. Those who are not offered a post after their first attempt should aim to build on their interview experience. Consider undertaking a period of research (MSc, MD or PhD) to boost academic attainment and critical appraisal technique. Alternatively, some time as a non-training registrar may help to develop confidence in technical skills, clinical management and communication with consultant colleagues. Familiarity with the interview and a positive approach to

another attempt should boost confidence and performance greatly.

CONCLUSIONS

Successfully attaining a specialty training number in vascular surgery can be challenging. However, careful preparation considering the tips described in this article may help in achieving this goal. With enough time allowed, most conceivable scenarios within the interview can be prepared for. Systematic analysis and a comprehensive understanding of the expectations of the training programme and the interview process will improve the likelihood of success.

References

1. Health Education England. Competition ratios 2018. <https://specialtytraining.hee.nhs.uk/Competition-Ratios> (cited October 2019).
2. Choong W, Waduud M, McKinley A *et al*. Core surgical training: 12 tips for securing a post. *BMJ* 2014; **349**: g6132.
3. Patel R, Sayers A, Amar D. How to prepare for the ST3 general surgery application. *BMJ* 2016; **352**: i352.
4. Health Education England. Person specification vascular ST3. <https://specialtytraining.hee.nhs.uk/Recruitment/Person-specifications> (cited October 2019).
5. Health Education England. Portfolio preparation best practice guide. <https://specialtytraining.hee.nhs.uk/Resources-Bank> (cited October 2019).
6. Intercollegiate Surgical Curriculum Programme. *Vascular Surgery Curriculum including Simulation*. 2014, 2015, 2016 and 2018. www.gmc-uk.org/-/media/documents/vascular-inc_trauma-tig-approved-jul-17_pdf-72509215.pdf (cited October 2019).
7. Petrie A, Sabin C. *Medical Statistics at a Glance*, 3rd ed. Chichester: Wiley-Blackwell; 2009.